SAMSUNG TECHWIN

4 CHANNEL DVR

User Manual

SRD-470/470D

4 Channel DVR
User Manual

Copyright

©2009 Samsung Techwin Co., Ltd. All rights reserved.

Trademark

SAMSUNG TECHWIN is the registered logo of Samsung Techwin Co., Ltd.
The name of this product is the registered trademark of Samsung Techwin Co., Ltd.
Other trademarks mentioned in this manual are the registered trademark of their respective company.

Restriction

Samsung Techwin Co., Ltd shall reserve the copyright of this document. Under no circumstances, this document shall be reproduced, distributed or changed, partially or wholly, without formal authorization of Samsung Techwin.

Disclaimer

Samsung Techwin makes the best to verify the integrity and correctness of the contents in this document, but no formal guarantee shall be provided. Use of this document and the subsequent results shall be entirely on the user's own responsibility. Samsung Techwin reserves the right to change the contents of this document without prior notice.

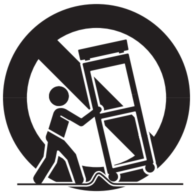
Warranty

Samsung Techwin Co., Ltd shall reserve the copyright of this document. Under no circumstances, this document shall be reproduced, distributed or changed, partially or wholly, without formal authorization of Samsung Techwin.

IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit.
Follow all the safety instructions listed below.
Keep these operating instructions handy for future reference.

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding- type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. if the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



BEFORE START

This user manual provides Information for using the DVR such as brief introduction, part names, functions, connection to other equipment, menu setup, etc.
You have to keep in mind the following notices :

- SAMSUNG retains the copyright on this manual.
- This manual cannot be copied without SAMSUNG's prior written approval.
- We are not liable for any or all losses to the product incurred by your use of non-standard product or violation of instructions mentioned in this manual.
- Prior to opening the case, please consult a qualified technician first. Whenever this is needed power must be removed from the unit.
- Before installing an additional HDD or connecting an external storage device (USB memory or USB HDD) to this DVR, check the compatibility. Consult your provider for the compatibility list.

Warning

❖ Battery

It is essential that when changing the battery in the unit, the replacement battery must be of the same type otherwise there may be a possibility of an explosion.
The following are the specifications of the battery you are using now.

- Normal voltage : 3V
- Normal capacity : 170mAh
- Continuous standard load : 0.2mA
- Operating temperature : -20°C ~ +85°C (-4°F ~ +185°F)

CALIFORNIA USA ONLY

This Perchlorate warning applies only to primary CR (Manganese Dioxide) Lithium coin cells in the product sold or distributed ONLY in California USA.
"Perchlorate Material - special handling may apply,
See www.dtsc.ca.gov/hazardouswaste/perchlorate."

- Connect the power cord into a grounded outlet.
- The Mains plug is used as a disconnect device and shall stay readily operable at any time.
- Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

❖ System Shutdown

Turning off the power while the product is in operation, or undertaking improper actions may cause damage or malfunction to the hard drive or the product.
Please turn off the power using the Power button on the front of your DVR.
After selecting <**OK**> in the pop-up menu, you can pull off the power cord.
You may want to install a UPS system for safe operation in order to prevent damage caused by an unexpected power stoppage. (Any questions concerning UPS, consult your UPS retailer.)

❖ Operating Temperature

The guaranteed operating temperature range of this product is 0°C ~ 40°C (32°F ~ 104°F).
This product may not work properly if you run right after a long period of storage at a temperature below the guaranteed one.
Prior to using a device that has been stored for a long period in low temperatures, allow the product to stand at room temperature for a period.
Especially for the built-in HDD in the product, its guaranteed temperature range is 5°C ~ 55°C (41°F ~ 131°F).
Likewise, the hard drive may not work at a temperature below the guaranteed one.

❖ Ethernet Port

This equipment is in door use and all the communication wirings are limited to inside of the building.

CONTENTS

OVERVIEW 4

4 Before Start
7 Features
9 Part Names and Functions (Rear)
10 Part Names and Functions (Front)
12 Remote Control

INSTALLATION 13

13 Checking the installation environment
14 HDD Addition

CONNECTING WITH OTHER DEVICE 17

17 Connecting the Video, Audio, and Monitor
17 Connecting the USB
17 Connecting POS Device
18 Connecting the Alarm Input/Output
18 Connecting the RS485 Device
19 Connecting the Network

LIVE 21

21 Getting Started
23 Live Screen Configuration
27 Live Mode
29 Spot Out
29 Zoom
30 Audio ON/OFF
30 Freeze
30 Event Monitoring

USING THE DVR 32

32 System Setup
42 Setting the Device
50 Setting the Recording
53 Setting the Event
56 Backup
57 Network Configuration
64 Controlling a PTZ device

overview

SEARCH & PLAY
66
66 Search
69 Playback

WEB VIEWER
70
70 Introducing Web Viewer
71 Connecting Web Viewer
73 Using Live Viewer
79 Using Search Viewer
83 Viewer Setup
93 About

BACKUP VIEWER
94
94 SEC Backup Viewer

APPENDIX
96
96 Product Specification
99 Product Overview
100 Default Setting
103 Troubleshooting

FEATURES

The SRD DVR (Digital Video Recorder) employs H.264 video encoding for 4 channel inputs and G.723 audio encoding for 4 channels while simultaneously supports hard disc recording and playback.
These DVRs also supports network connectivity, providing remote monitoring from a remote PC transferring video and audio data.

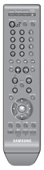
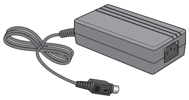
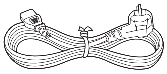
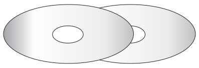
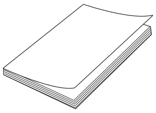
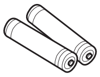
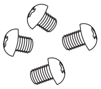
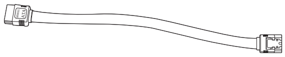
- 4 CH Composite Input Connectors
- CIF(S)/2CIF(M)/4CIF(L) Recording
- Network transfer regardless of the recording conditions using network specific codec
- Improved quality using de-interlace chip
- HDD information and status with HDD SMART
- Record at 4CIF Size (NTSC: 704*480, PAL: 704*576) 120(NTSC)/100(PAL)IPS
- 4 CH Loop Through video port
- HDD Overwrite
- Massive HDD backup via USB 2.0
- Backup using USB 2.0 memory and/or external CD/DVD writer
  (DVD writer not supported in SRD-470)
- Record and play 4 CH video data simultaneously
- Various search modes (time, event, backup, POS, motion detection)
- Lots of storage modes (time lapse, event, timed recording)
- HDD extension (USB 2.0)
- Alarm connection (input: 4, output:2, reset: 1)
- Remote monitoring via Windows Network Viewer

Standards Approvals

- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
  This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

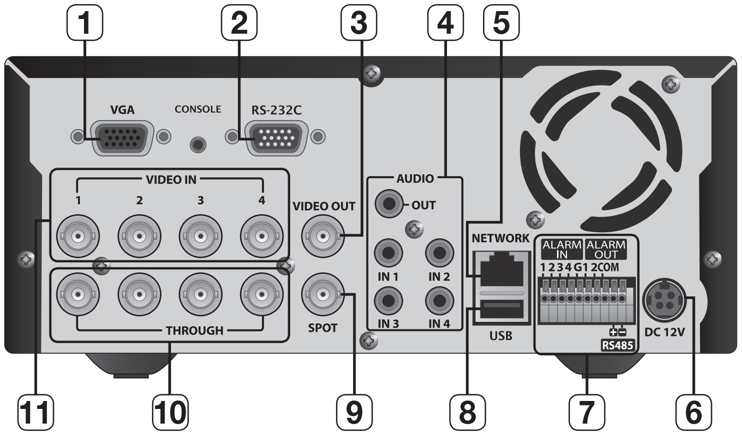
Package Contents

Please unwrap the product, and place the product on a flat place or in the place to be installed.
Please check the following contents are included in addition to the main unit.

		
Remote Control	Adaptor	Power Cable
		
Network Viewer Software / User Manual CD	User Manual	Remote Control Battery (AAA)
		
HDD Fixing Screw (Only applicable for SRD-470 : 4EA)	SATA Cable (Only applicable for SRD-470 : 1EA)	

- For models that are not equipped with the HDD, one SATA cable is provided for HDD installation.

PART NAMES AND FUNCTIONS (REAR)

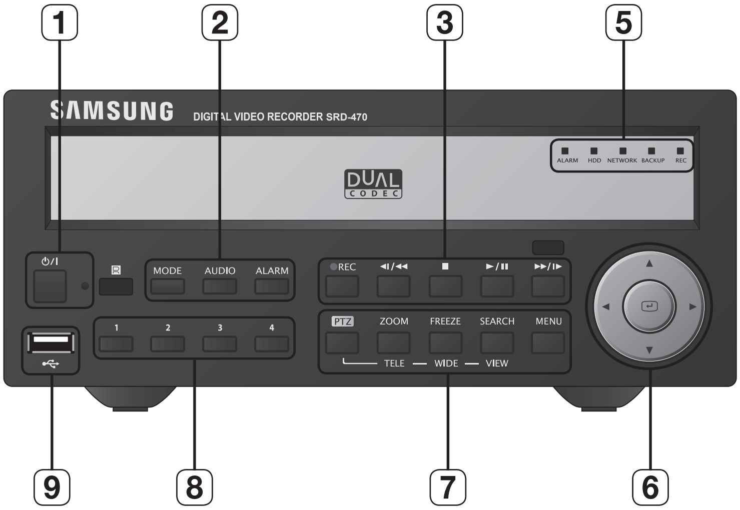

1
2
3
4
5
VGA
CONSOLE
RS-232C
VIDEO IN
1
2
3
4
VIDEO OUT
AUDIO
OUT
IN 1
IN 2
IN 3
IN 4
NETWORK
ALARM IN
ALARM OUT
1 2 3 4 G 1 2 COM
USB
RS485
DC 12V
THROUGH
SPOT
11
10
9
8
7
6

Part Names		Functions
1	VGA	Output port for VGA video signal.
2	RS-232C	RS-232C communications port.
3	VIDEO OUT	BNC type of output port for the composite video signal.
4	AUDIO OUT	Output port (RCA jack) for the audio signal. ■ It is recommended to use an amplifier-integrated speaker for the output of the audio signal.
	AUDIO IN 1~4	Output ports (RCA jacks) for the audio signal.
5	NETWORK	Network connection port.
6	DC 12V	Port to be connected to the 12V power source.
7	ALARM IN	**1~4, G** : Alarm input ports.
	ALARM OUT	**1, 2, COM** : Alarm output ports.
	RS485	Used to establish RS485 communications. (TX+, TX-)
8	USB	USB connection port.
9	SPOT	BNC type of output port for the Spot signal.
10	THROUGH	Port to transfer the video signal to other video devices.
11	VIDEO IN	Input port for the composite video signal. Supports both NTSC and PAL video signal.

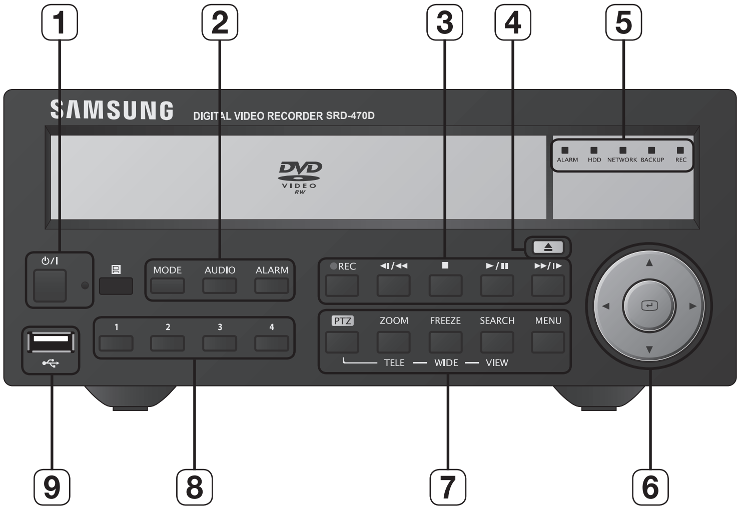
overview

PART NAMES AND FUNCTIONS (FRONT)

SRD-470

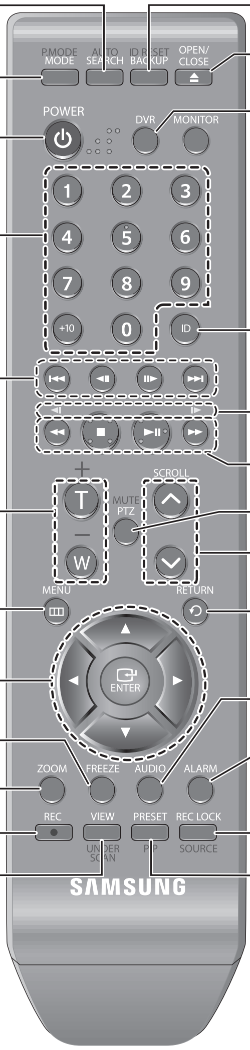

1
2
3
5
SAMSUNG
DIGITAL VIDEO RECORDER SRD-470
ALARM HDD NETWORK BACKUP REC
DUAL CODEC
MODE AUDIO ALARM
REC
PTZ ZOOM FREEZE SEARCH MENU
1 2 3 4
TELE WIDE VIEW
9
8
7
6

SRD-470D


1
2
3
4
5
SAMSUNG
DIGITAL VIDEO RECORDER SRD-470D
ALARM HDD NETWORK BACKUP REC
DVD VIDEO RW
MODE AUDIO ALARM
REC
PTZ ZOOM FREEZE SEARCH MENU
1 2 3 4
TELE WIDE VIEW
9
8
7
6

Part Names		Functions
1	Power	**Power LED** : Displays the power ON/OFF status.
		Power Button : Used to turn the DVR ON/OFF.
2	MODE	In Live mode, pressing it will switch the mode to 4-split, PIP, and Auto Sequence in sequence. In Search mode, pressing it will switch the mode to 9-split and 4-split in sequence. ■ For the Play Screen mode, refer to "**Play**". (page 69)
	AUDIO	Sets Audio ON/OFF.
	ALARM	Cancels the ALARM LED and the audible alarm when the alarm is going off, and to remove the icon.
3	REC	Starts or ends the recording.
	◀❙/◀◀	**Step Rewind** (◀❙) : Used for backward frame-by-frame search while in PAUSE. **Fast Rewind** (◀◀) : Used for quick backward search while in Play. (-x2, -x4, -x8, -x16, -x32, -x64)
	■	**Stop** : Used to stop the playback.
	►/❙❙	**Play/Pause** : Used to pause or resume the screen.
	►►/❙►	**Fast Forward** (►►) : Used for quick forward playback. (x2, x4, x8, x16, x32, x64) **Step Forward** (❙►) : Used for forward frame-by-frame search while in PAUSE.
4	Open/Close	Used to open and close the DVR-RW disc tray. (available for SRD-470D only)
5	LED Indicator	**ALARM** : Lights on when an event occurs.
		HDD : Displays the normal access to HDD. Upon access to HDD, LED repeats on and off.
		NETWORK : Displays both network connection and data transfer status.
		BACKUP : Displays when Backup is in progress.
		REC : Lights on when recording is in progress.
6	Direction & Select Button	Used to change a value or move the cursor up/down/left/right (▲▼◄ ►). Selects a menu item or executes the selected menu.
7	Camera Control	**PTZ** : Sets PTZ Mode ON/OFF.
		ZOOM(TELE) : Sets the screen to the x2 digital zoom. Runs the TELE function in the PTZ Mode.
		FREEZE(WIDE) : Runs the FREEZE function in the Live Mode. Runs the WIDE function in the PTZ Mode.
		SEARCH(VIEW) : This is the function that switches over to the Search mode. (Perform the VIEW function when selecting the **PTZ** button.)
		MENU : Used to access the Menu screen or move to the previous menu.
8	Channel	Used to select channel numbers directly in the Live Mode, or numbers in the numeric input mode.
9	USB Port	Connects the USB devices.

REMOTE CONTROL


P.MODE
MODE
AUTO SEARCH
ID RESET BACKUP
OPEN/CLOSE
POWER
DVR
MONITOR
1
2
3
4
5
6
7
8
9
+10
0
ID
+
T
MUTE PTZ
SCROLL
–
W
MENU
RETURN
ENTER
ZOOM
FREEZE
AUDIO
ALARM
REC
VIEW
PRESET
REC LOCK
UNDER SCAN
PIP
SOURCE
SAMSUNG

SEARCH
Displays the search menu.

MODE
Changes the screen mode.

POWER
Displays the Exit pop up screen.

NUMBER [0~+10]
Used as the numeric input keys, or displays a single channel.

Skip Backward (by unit time), Slow Rewind, Slow Forward, Skip Forward (by unit time)

T/W
Zooms in or out.

MENU
Goes to the system menu screen.

Up/Down/Left/Right(▲▼◄ ►)/ENTER
Moves the cursor up/down/left/right, and runs the Select Menu.

FREEZE
Freezes the screen temporarily.

ZOOM
Runs the digital zoom (x2) function.

REC
Starts or ends the live recording.

VIEW
Runs the View function in the PTZ mode.

BACKUP
Displays the Backup Menu.

OPEN/CLOSE
Opens or closes the CD tray.

DVR
Activates the DVR function.

ID
Sets the ID of the system.
Select 2 digits from 0 ~ 9 while pressing the ID Key.

Move Frame
While paused, moves to the previous/next frame.

FR, STOP, PLAY/PAUSE, FF

PTZ
Displays or ends PTZ.

SCROLL ∧∨
Moves the menu scroll.

RETURN
Returns to the previous screen.

AUDIO
Turns Audio on/off.

ALARM
Cancels the Alarm.

REC LOCK
Selects the recording lock function.

PRESET
Displays the Preset Setup.

Using the Numeric buttons

1. Press any button among 1 to 4.
2. Move to the selected channel number.

Changing the Remote Control ID

1. Press the ID button of the remote control and check the ID displayed on the DVR screen.
   The factory default ID of the remote control is 00.
2. Enter 2 digits of your selection in order, while pressing the system [**ID**] button.
3. When ID input is done, press the system [**ID**] button again to check the setting.

- If you want to change the remote control ID to 08: Press 0 and 8 in order while the system [**ID**] button is pressed.
  Remote control's ID and DVR's ID should be matched for proper operation. Refer to "**Remote Devices**". (Page 46)

installation

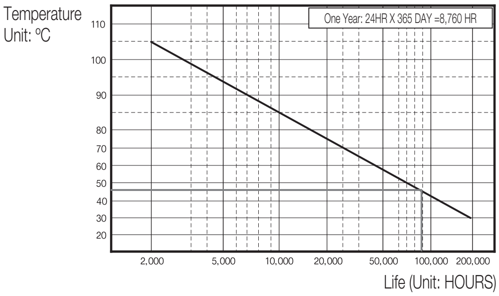
Please take note of the followings before using this product.

- Do not use the product outdoor.
- Do not spill water or liquid in the connection part of the product.
- Do not impose the system to excessive shock or force.
- Do not pull out the power plug forcefully.
- Do not disassemble the product on your own.
- Do not exceed the rated input/output range.
- Use a certified power cord only.
- For the product with an input ground, use a grounded power plug.

CHECKING THE INSTALLATION ENVIRONMENT

Samsung Digital Video Recorder (“DVR” hereinafter) is a state-of-art security device, and contains mass storage hard disk(s) and critical circuits inside.

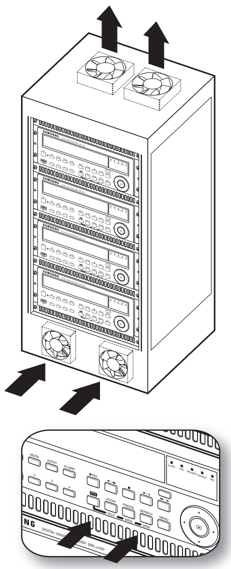
When the temperature rises inside the product, the product may breakdown and the product life be shortened. Please pay attention to the following recommendations before installation.



[Figure 1]

The followings are the recommendations when Samsung DVR is installed on a rack.

1. Please ensure that the rack inside is not sealed.
2. Please ensure the air is circulated through the inlet/outlet as shown in the picture.
3. If the DVR or other devices on a rack is to be stacked as in the picture, provide a suitable space or install a ventilating opening for air circulation.
4. For natural air convection, place the inlet at the bottom of the rack and the outlet on top.
5. It is strongly recommended that a fan motor is installed at the inlet and the outlet for air circulation. (Please fit a filter at the inlet to screen dust or foreign substances.)
6. Please maintain the temperature inside the rack or surrounding areas between 0°C ~ 40°C (32°F ~ 104°F) as shown in the figure 1.



[Figure 2]

Rack Mount Instructions - The following or similar rack-mount instructions are included with the installation instructions :

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

E) Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

HDD ADDITION

You can install additional HDDs.
Make sure to unplug the power cord from the wall outlet to prevent possible electric shock, injury or product damage.
Please consult your provider for further information on HDD installation since improper installation or settings may damage the product.

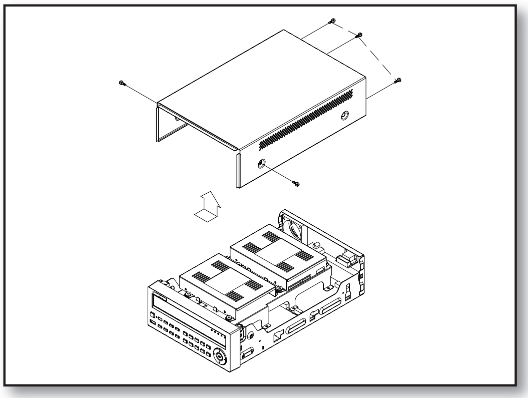
- Number of HDDs supported : SRD-470 : Default 1 HDD + Up to 1 HDD added
  SRD-470D : Default 1 HDD
- Make sure to unplug the power cord from the wall outlet before proceeding with the installation.

- **Cautions for data loss (HDD care)**
  Please pay attention so that the data inside the HDD is not damaged.
  Before adding a HDD, please check the compatibility with this DVR product.
  HDD is vulnerable to malfunction due to its sensitive nature especially against shock when operating.
  Please ensure that the HDD is free from such shock.
  We are not liable for any damage to the HDD incurred by user's carelessness or miss use..
- **Cases might cause damage to HDD or recorded data**
  To minimize the risk of data loss from a damaged HDD, please backup data as often as possible.
  Data may be lost due to external impacts during disassembly or installation of the DVR.
  HDD may be damaged if the DVR is suddenly stopped by a power cut or power off during operation.
  HDD or files stored inside may be damaged if the main body is moved or impacted during the HDD operation.

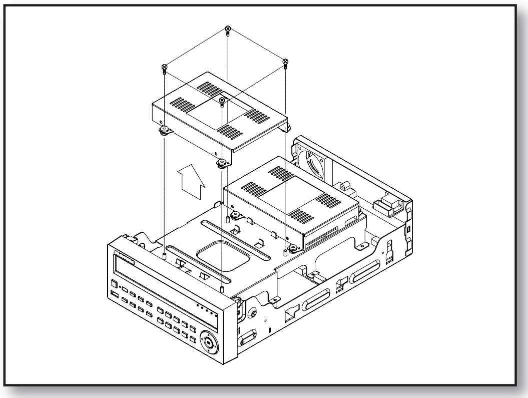
Cautions when adding a HDD

1. When adding a HDD, ensure that the cable does not get caught or the insulation does not come off.
2. Pay attention so as not to lose the disassembly screws or accessories.
   - If the screws or accessories are not put together correctly, the product may breakdown or not operate properly.
3. Please check the HDD compatibility before adding a HDD.
   - Please contact your nearest dealer to obtain the list of compatible devices.

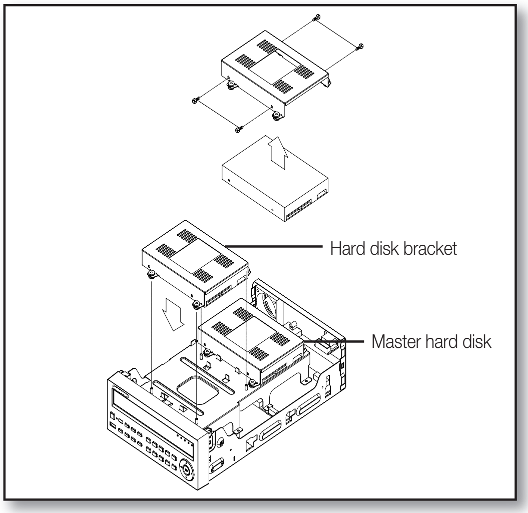
1. First, loosen the screws on both sides and remove the cover.



2. Loosen the left and right screws on the lower hard disk bracket to remove it.

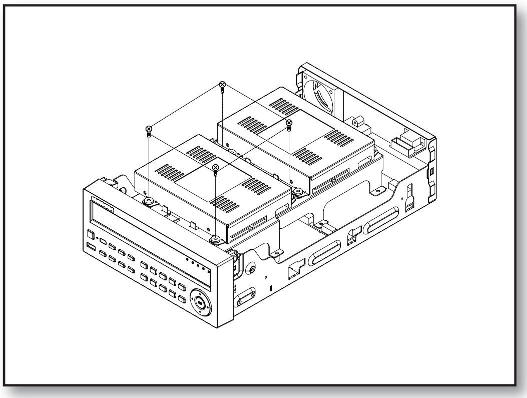


3. Insert the additional hard disk into the bracket and fix it using the provided screws.

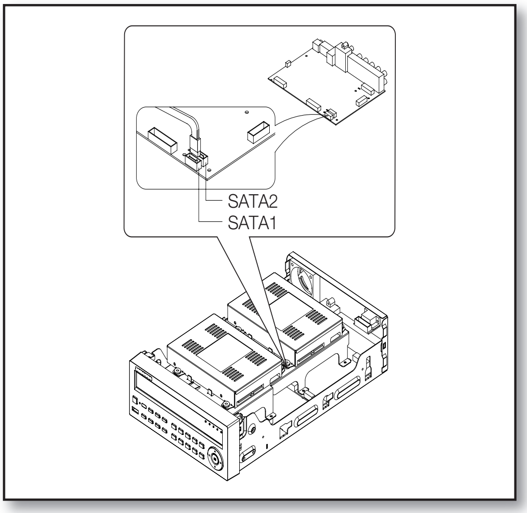

Hard disk bracket
Master hard disk

installation

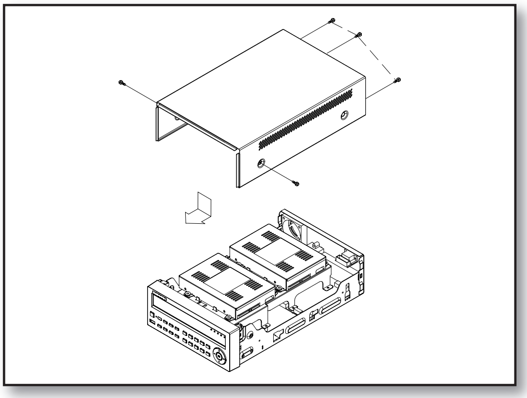
4. Insert the bracket where the additional hard disk is inserted into the lower bracket and fix it using the provided screws.



5. When done, connect the power cable and connect the signal cable (SATA cable) to the connector for the main board.

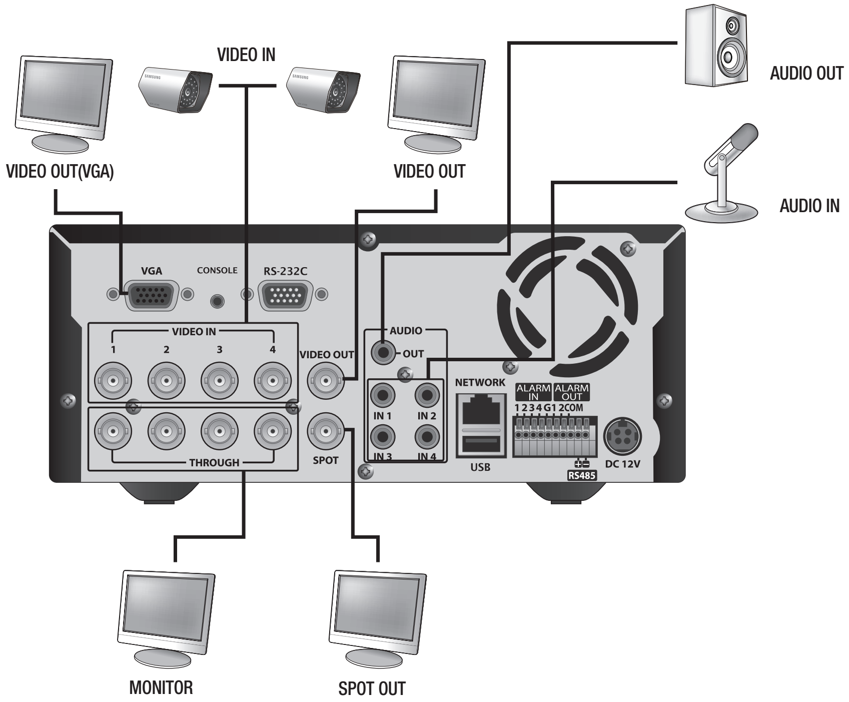


6. Check if the connectors are properly connected and there is no problem with wiring, and close the cover and fix it with screws.



connecting with other device

CONNECTING THE VIDEO, AUDIO, AND MONITOR


VIDEO IN
VIDEO OUT(VGA)
VIDEO OUT
AUDIO OUT
AUDIO IN
VGA
CONSOLE
RS-232C
VIDEO IN
1
2
3
4
VIDEO OUT
AUDIO
OUT
IN 1
IN 2
IN 3
IN 4
NETWORK
ALARM IN
ALARM OUT
1 2 3 4 G 1 2 COM
USB
RS485
DC 12V
THROUGH
SPOT
MONITOR
SPOT OUT

CONNECTING THE USB

1. There is one USB port at the front and one at the back of the product.
2. You can connect a USB HDD, USB CD/DVD player, USB memory or mouse to the USB port.
3. If a USB HDD is connected to the system, recognition and settings are available in “**Menu** > **Setting the Device** > **Storage Device**”. (Page 44)
4. This product supports hot-plugging, which connects/removes the USB device during the system operation.

- If you use the USB device for Backup purposes, format it with FAT32 on PC if it is not formatted on the DVR.

CONNECTING POS DEVICE

1. You can connect a POS device to the RS-232C port on the product’s rear side when you connect it directly with a RS-232C cable.
2. Connection setup for the RS-232C port is available in “**Menu** > **Device** > **POS Devices**”, press the <**POS Device Setup**> button and set <**Baudrate, Parity, Data, Stop bit and Transfer Type**>. (Page 47)

CONNECTING THE ALARM INPUT/OUTPUT

Connecting the alarm input signal

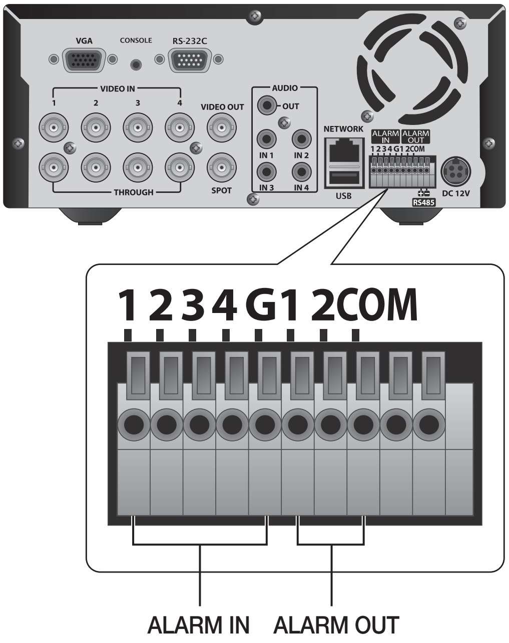
Connection port for the alarm input signal.

Connect one strand of the sensor signal line (two strands) to the alarm input port and connect the other to the [**G**] port.

Connecting the alarm output signal

Connection port for the alarm output signal.

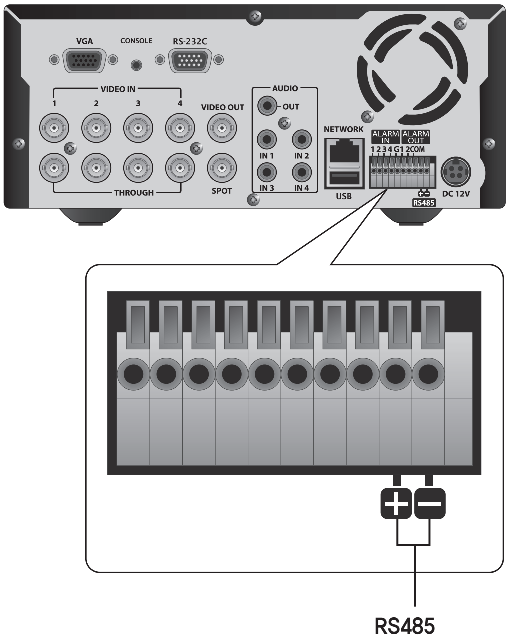
Connect one strand of the sensor signal line (two strands) to the alarm output port and connect the other to the [**COM**] port.


VGA
CONSOLE
RS-232C
VIDEO IN
1
2
3
4
VIDEO OUT
AUDIO
OUT
IN 1
IN 2
IN 3
IN 4
THROUGH
SPOT
NETWORK
USB
ALARM IN
ALARM OUT
1 2 3 4 G1 2COM
RS485
DC 12V
1 2 3 4 G 1 2 COM
ALARM IN
ALARM OUT

CONNECTING THE RS485 DEVICE

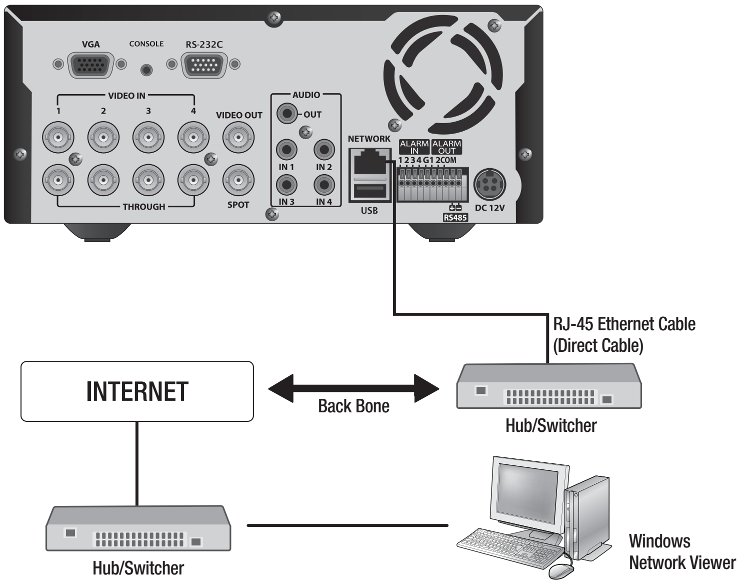
Connect the rear [**RS485 +, –**] ports to the external device.

- ex) you can connect and control the PTZ camera which supports the RS485 communication.
- Check if the RS485 device is compatible with the product first.
- Pay attention not to change the polarity (+/-) of the RS485 device when connecting it.
- Depending on camera's type, connection polarity can be different.
  For further information, refer to the respective PTZ Camera's documentation.

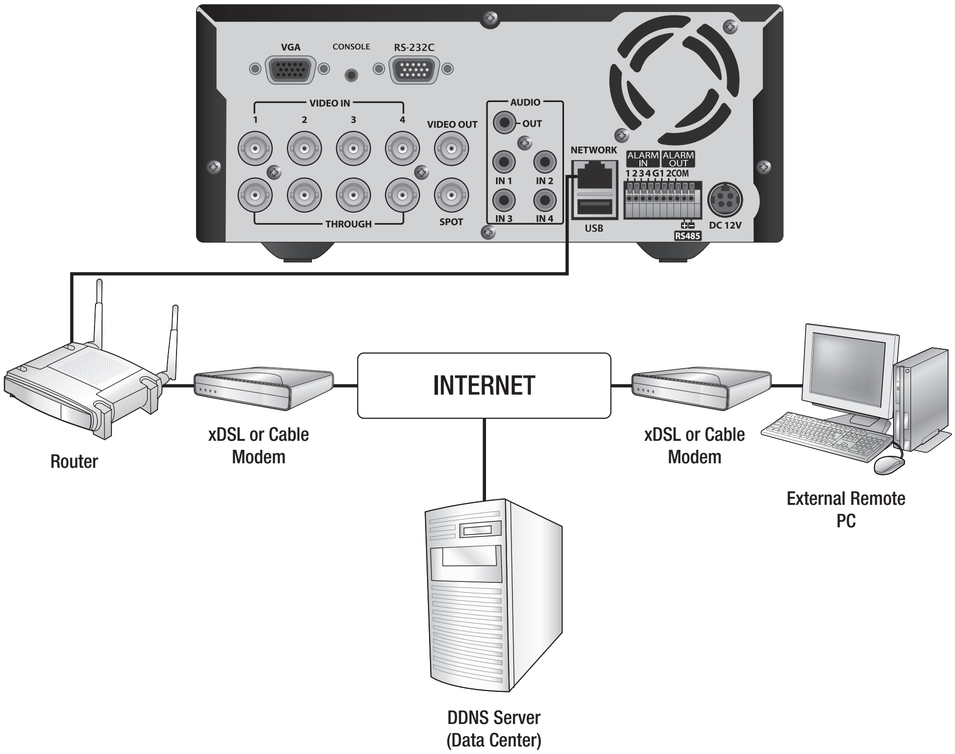

VGA
CONSOLE
RS-232C
VIDEO IN
1
2
3
4
VIDEO OUT
AUDIO
OUT
IN 1
IN 2
IN 3
IN 4
THROUGH
SPOT
NETWORK
USB
ALARM IN
ALARM OUT
1 2 3 4 G1 2COM
RS485
DC 12V
+
−
RS485

CONNECTING THE NETWORK

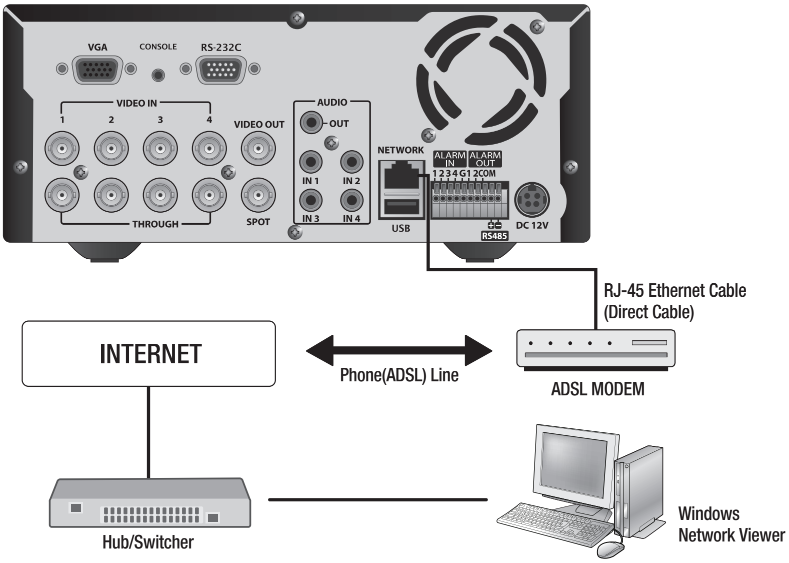
Connecting to Internet through Ethernet (10/100/1000BaseT)


VGA
CONSOLE
RS-232C
VIDEO IN
1
2
3
4
VIDEO OUT
AUDIO
OUT
NETWORK
ALARM IN
ALARM OUT
1 2 3 4 G 1 2 COM
IN 1
IN 2
IN 3
IN 4
THROUGH
SPOT
USB
RS485
DC 12V
RJ-45 Ethernet Cable
(Direct Cable)
INTERNET
Back Bone
Hub/Switcher
Hub/Switcher
Windows
Network Viewer

Connecting to the Internet using the router


VGA
CONSOLE
RS-232C
VIDEO IN
1
2
3
4
VIDEO OUT
AUDIO
OUT
NETWORK
ALARM IN
ALARM OUT
1 2 3 4 G 1 2 COM
IN 1
IN 2
IN 3
IN 4
THROUGH
SPOT
USB
RS485
DC 12V
INTERNET
Router
xDSL or Cable
Modem
xDSL or Cable
Modem
External Remote
PC
DDNS Server
(Data Center)

Connecting to Internet through ADSL

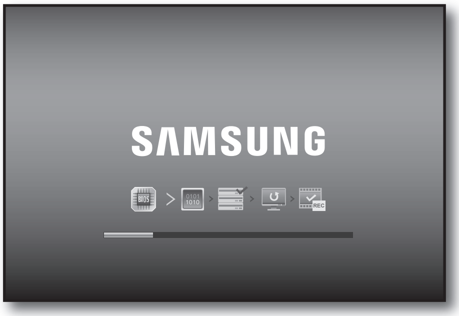

VGA
CONSOLE
RS-232C
VIDEO IN
1
2
3
4
VIDEO OUT
AUDIO
OUT
IN 1
IN 2
IN 3
IN 4
THROUGH
SPOT
NETWORK
USB
ALARM IN
ALARM OUT
1 2 3 4 G 1 2 COM
RS485
DC 12V
RJ-45 Ethernet Cable
(Direct Cable)
INTERNET
Phone(ADSL) Line
ADSL MODEM
Hub/Switcher
Windows
Network Viewer

live

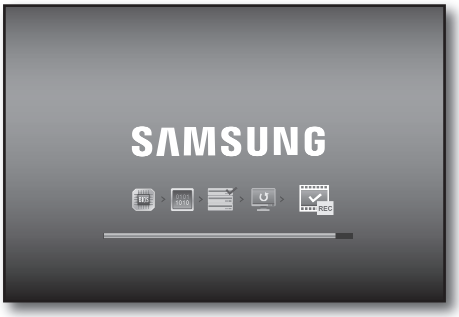
GETTING STARTED

Starting the system

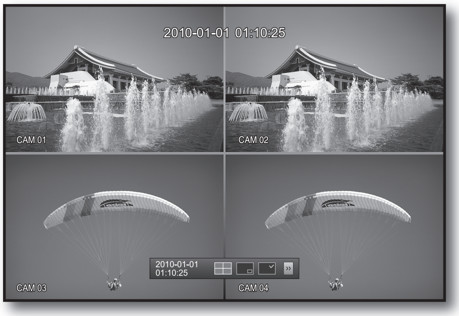
1. Connect the power cable of the DVR to the wall outlet.
2. Press the Power button on the front panel.


SAMSUNG
BIOS
0101
1010
REC

3. You will see the initialization screen.
   The initialization process will last about 1 minute.
   If a new HDD is installed, the initialization process may take longer.


SAMSUNG
BIOS
0101
1010
REC

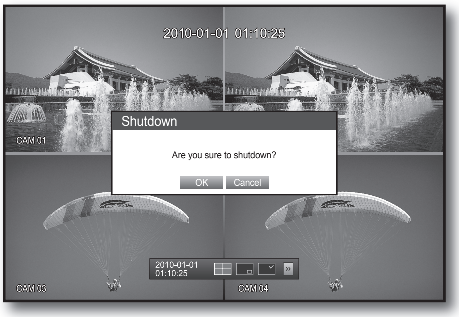
4. The live screen appears with a beep.


2010-01-01 01:10:25
CAM 01
CAM 02
CAM 03
CAM 04
2010-01-01
01:10:25

Shutting Down the System

You can shut down the system only if you have logged in to the DVR.
You require permission to shut down the system if you are not logged in as admin.

1. Press the [**POWER**] button on the remote control or the front panel, or right-click to display the context sensitive menu and select <**Shutdown**>.
2. The “**Shutdown**” confirmation window appears.
3. Use the arrow keys on the remote control or the front panel to move to <**OK**> and press the [**ENTER**] button or click <**OK**>.
   The system will shut down.


Shutdown

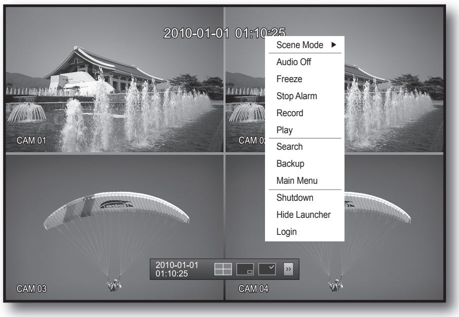
Are you sure to shutdown?
2010-01-01 01:10:25
CAM 01
CAM 03
CAM 04
OK
Cancel
2010-01-01
01:10:25

- For the permission management, refer to “**Permission Management** > **Setting Permissions**”. (Page 37)

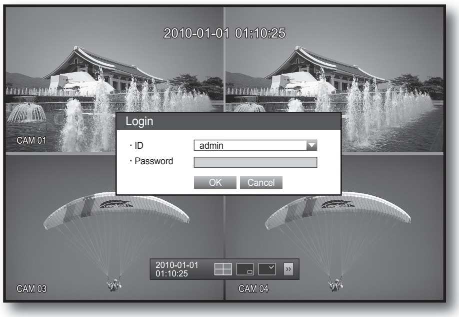
Login

To access a DVR or restricted menu, you should have logged in to the DVR.

1. In live mode, right-click any area of the screen.
   You will see the context sensitive menu as in the right figure.


2010-01-01 01:10:25
Scene Mode
Audio Off
Freeze
Stop Alarm
Record
Play
Search
Backup
Main Menu
Shutdown
Hide Launcher
Login
CAM 01
CAM 02
CAM 03
CAM 04
2010-01-01 01:10:25

2. Click <**Login**>.
   The login dialog appears.
   You can also see the login dialog to access a desired menu by pressing the [**MENU**] button on the remote control or the front panel.
   - The login dialog will also appear if you press a menu button on the remote control or the front panel of the DVR when the corresponding menu requires logging in.
   - After logged in, press [**RETURN**] on the remote control to display the logout dialog.
   - By default, initial ID and password are set to "**admin**", and "**4321**".


2010-01-01 01:10:25
Login
OK
Cancel
CAM 01
CAM 03
CAM 04
2010-01-01 01:10:25

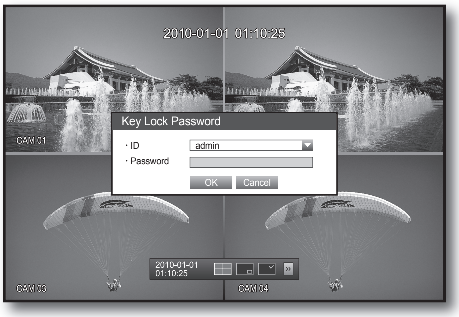
· ID admin
· Password

- For the restricted permission, refer to "**Permission Management** > **Setting Permissions**". (Page 37)

Locking All Buttons

This will restrict access to all buttons available in the DVR.

1. In Live mode, press buttons in the order of [**STOP**]→[**FREEZE**]→[**STOP**]→[**FREEZE**]→[**MENU**].
   All buttons will be locked.
2. In the lock condition, press any button to display a dialog where you are prompted to enter the password for unlocking the buttons.
   The button lock will be released if you enter the admin password.

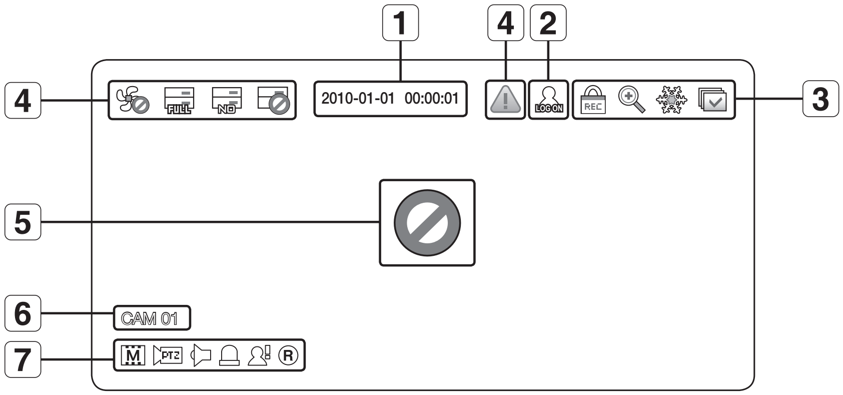

2010-01-01 01:10:25
Key Lock Password
OK
Cancel
CAM 01
CAM 03
CAM 04
2010-01-01 01:10:25

· ID admin
· Password

LIVE SCREEN CONFIGURATION

Icons on the Live Screen

You can check the status or operation of the DVR with the icons on the live screen.



Name			Description
1	Current Date, Time		Displays the current time and date.
2	Login Information		When you are logged in, the “**LOG ON**” icon will be displayed.
3	Screen Mode	🔍	Displayed if the zoom function is activated.
		❄	Displayed if you press the Pause button.
		☑	Displayed in Auto Sequence mode where all channels are switched at the specific time interval.
		REC	Displayed if the recording is in process. ✎ To cancel the recording, enter the password.
4	System Operation	⊘	Displayed if there is a problem with the cooling fan.
		FULL	Displayed if the HDD is full and the DVR has an insufficient space to record.
		NO	Displayed if no HDD is installed or the existing HDD should be replaced.
		⊘	Displayed if the HDD needs a technical examination.
		⚠	Displayed if a new firmware is found from the network.
5	Video Input Status	⊘	Displayed if no input is entered in the condition that the camera is set to <**ON**>.
			Nothing will be displayed on the screen if the camera is set to <**OFF**>.
6	Camera Name/ Channel		Displays the camera name and the changed channel, if any.
7	Camera Operation	L / M / S	Displays the resolution of the recording screen. (Page 52)
		PTZ	Displayed in PTZ setting, and highlighted yellow if PTZ is in operation.
		🔈 / 🔇	Displays AUDIO ON/MUTE. Not displayed in video mode if deactivated.
		🔔	If the sensor is set to <**ON**>, the input signal will be displayed on the screen of the connected channel.
		👤!	Displayed if a motion detected in the condition that the motion detection is set to <**ON**>.
		Ⓡ / Ⓔ / Ⓢ	Displays the current record mode from Record/Event/Schedule.

Error Information

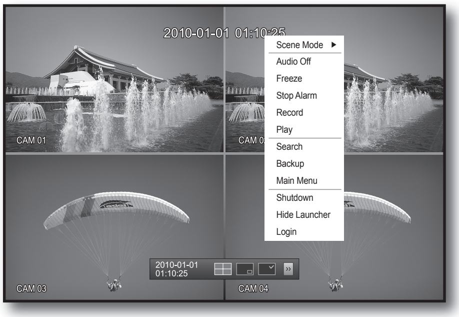
- If you turn on the system when the internal HDD is not connected or an error occurs, the “HDD FAIL” icon ( ) will be displayed on the top left corner. In this case, make sure you contact the service center for assistance as this may cause a failure of recording, playback or backup.
- If the cooling fan does not work properly or has a problem, the <**Fan Information**> window will appear and the fan error icon ( ) will be displayed on the top left corner. In this case, check to see if the internal fan works.
  As a fan error can shorten the product life, make sure you contact the service center for assistance.

- If you see the fan error icon or No HDD, HDD FAIL icons on the screen, contact the service center for more details.

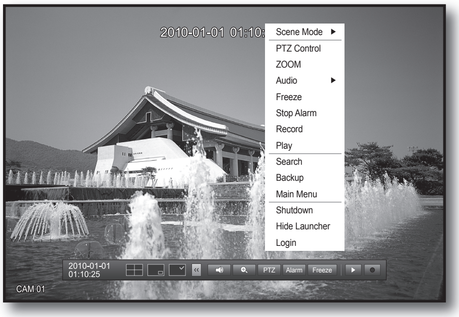
Live Screen Menu

In addition to the buttons on the front panel or the remote control, you can access a desired menu by right-clicking the mouse any area in live mode.
The context sensitive menu that appears by right-clicking the screen may differ, depending on the login/logout, screen split mode and DVD operation mode.

- Menu items of Search, Record, Backup, Shutdown and PTZ can be deactivated, depending on the user permission.


2010-01-01 01:10:25
Scene Mode
Audio Off
Freeze
Stop Alarm
Record
Play
Search
Backup
Main Menu
Shutdown
Hide Launcher
Login
CAM 01
CAM 02
CAM 03
CAM 04
2010-01-01 01:10:25

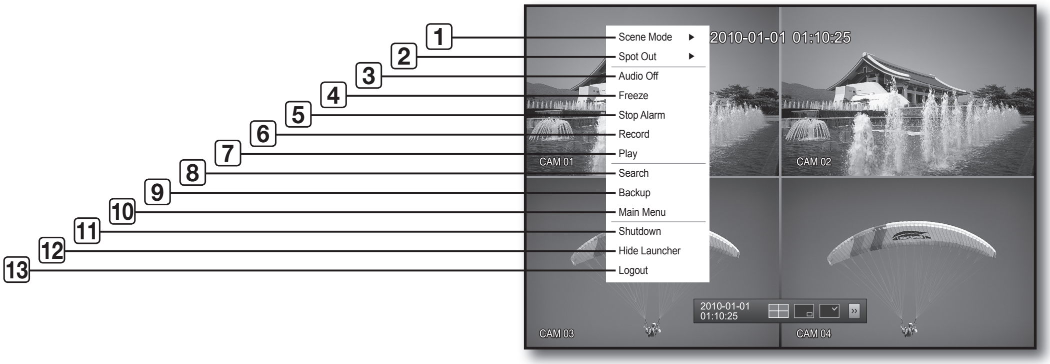
< Split Mode Menu >


2010-01-01 01:10:25
Scene Mode
PTZ Control
ZOOM
Audio
Freeze
Stop Alarm
Record
Play
Search
Backup
Main Menu
Shutdown
Hide Launcher
Login
CAM 01
2010-01-01 01:10:25
PTZ
Alarm
Freeze

< Single Mode Menu >

Split Mode Menu

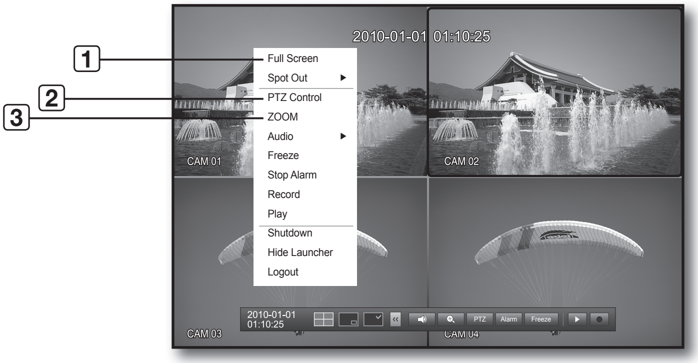
The context sensitive menu in split mode differs, depending on the login/logout status.


1 Scene Mode
2 Spot Out
3 Audio Off
4 Freeze
5 Stop Alarm
6 Record
7 Play
8 Search
9 Backup
10 Main Menu
11 Shutdown
12 Hide Launcher
13 Logout
2010-01-01 01:10:25
CAM 01
CAM 02
CAM 03
CAM 04
2010-01-01 01:10:25

Menu		Description
1	**Scene Mode**	Refer to "**Live Mode**". (Page 27)
2	**Spot Out**	Refer to "**Spot Out**". (Page 29)
3	**Audio On/Off**	Refer to "**Audio ON/OFF**". (Page 30)
4	**Freeze**	Refer to "**Freeze**". (Page 30)
5	**Stop Alarm**	Stops the alarm output and the event monitoring. Refer to "**Event Monitoring**". (Page 30)
6	**Record/Stop**	Starts/stops the standard recording.
7	**Play**	Plays the search result (data). Refer to "**Search & Play** > **Play**". (Page 69)
8	**Search**	Refer to "**Search & Play** > **Search**". (Page 66)
9	**Backup**	Refer to "**Using the DVR** > **Setting the Backup**". (Page 56)
10	**Main Menu**	Accesses the main menu. Refer to the Using the DVR section. (Page 32)
11	**Shutdown**	Turns down the DVR.
12	**Show/Hide Launcher**	Shows or hides the launcher. Refer to "**View the Launcher Menu**". (Page 26)
13	**Login/Logout**	You can log in or out.

Single Mode Menu

The single mode menu is available only in Single Mode.
The context sensitive menu for the One Channel mode, in Split mode is different from that of the Single mode.


1
2
3
2010-01-01 01:10:25
Full Screen
Spot Out ▶
PTZ Control
ZOOM
Audio ▶
Freeze
Stop Alarm
Record
Play
Shutdown
Hide Launcher
Logout
CAM 01
CAM 02
CAM 03
CAM 04
2010-01-01 01:10:25
PTZ
Alarm
Freeze

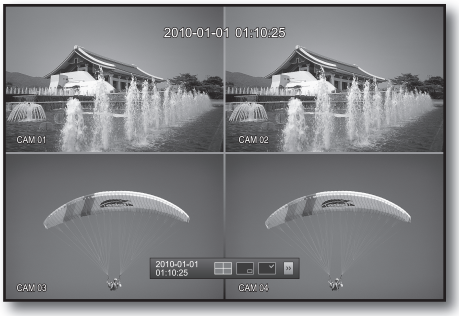
Menu		Description
1	**Full Screen**	Select and click a desired channel in Split mode to switch to the full screen of the selected channel.
2	**PTZ Control**	Accesses the PTZ Control menu. The PTZ menu is activated only in One-Channel Live mode. (Page 64)
3	**ZOOM**	Enlarges the selected image. (Page 29)

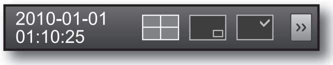
View the Launcher Menu

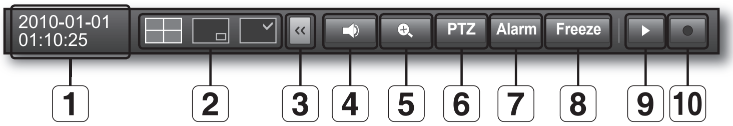
The Launcher menu appears on the bottom of the live screen.

1. In Live mode, right-click to display the context menu and select <**Show Launcher**>.
2. Move the cursor to the bottom and click a desired item in the Launcher menu.

- If no input is entered for 10 seconds, the menu will disappear.
- The Launcher menu can be accessed only by using the mouse.


2010-01-01 01:10:25
CAM 01
CAM 02
CAM 03
CAM 04
2010-01-01
01:10:25


2010-01-01
01:10:25


2010-01-01
01:10:25
PTZ
Alarm
Freeze
1
2
3
4
5
6
7
8
9
10

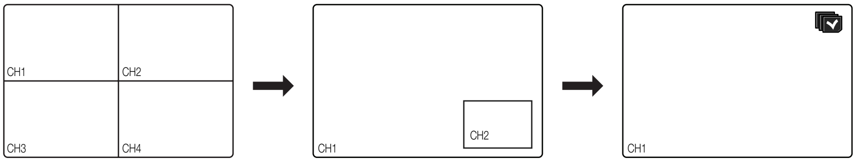
Menu		Description
1	**Date/Time**	Displays the current time and date. The indication of AM/PM is displayed if you set 12 hours for the time format in "**System** > **Date/Time/Language** > **Time**". (Page 32)
2	**Screen Mode**	Displays in the sequence of 4-split, PIP and Auto Sequence.
3	**Menu Expansion Button**	Click to display the hidden menu to the right.
4	**Audio**	Turns ON/OFF the sound of the selected channel.
5	**Zoom**	Enlarges the selected area. This is available only in Single Live mode.
6	**PTZ**	Runs the PTZ Control launcher.
7	**Alarm**	Stops the alarm if it's activated.
8	**Freeze**	Freezes the Live screen temporarily.
9	**Play**	Enters Play mode if a file to play exist, and if not, enters Search mode.
10	**Record**	Start/End recording the Live screen.

LIVE MODE

Displays 4 live video images in 3 different modes.

Switching the screen mode

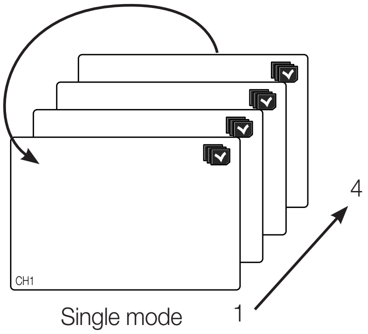
To switch the split mode, select a screen mode in the launcher menu, or right-click to select a screen mode in the context menu.
Press the [**MODE**] button on the front panel or the remote control to switch the mode in the sequence of the launcher menu items.



4-split mode PIP Auto Sequence

Switching the screen automatically

With SRD-470/470D, you can display 4 live single screens in sequence.



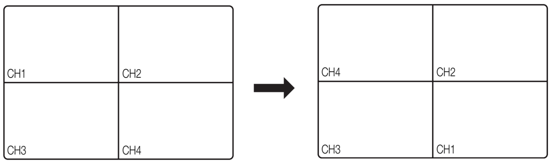
Single mode

- In Single mode, If you have set <**SEQ-Dwell Time**> in “**Setting the Device** > **Camera**”, Auto Sequence will be conducted at the set interval. (Page 42)

Channel Setting

You can display the channel in a desired area of a split screen.

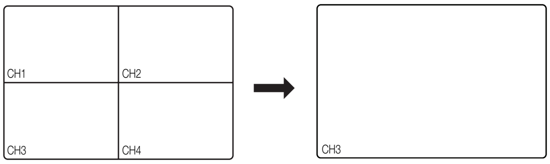
1. Place the cursor over the camera name of each channel to display the <▼> key to the right on the screen.
2. Click a camera name to display a channel list where you can select a different channel.
3. Select a desired channel and click it.
   The current channel will be switched to the selected one.
   Use the cursor to select a channel to move, and drag and drop it to a desired channel; this can also change the channel position.
   - Ex : if switching CH 1 to CH 4



Switching to Single Mode

When in split mode, select and double-click a desired channel to switch to its Single mode.
Press the number corresponding to a desired channel on the front panel or the remote control to switch to its Single mode.
Refer to "**Remote Control** > **Using the numeric buttons**". (Page 12)

- Ex : If double-clicking CH 3 or pressing the number "3" on the remote control or the front panel.



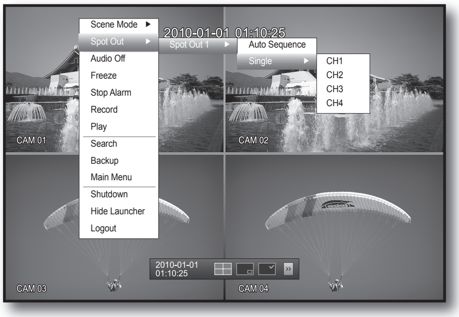
SPOT OUT

The Spot Out monitoring is independent of the Live mode, which monitors a specific channel through the Spot Out port.

Selecting a Spot Out mode

If an event occurs such as sensor, motion or alarm from the Spot Out port in connection with a monitor, you can select a output screen mode.

1. In Live mode, right-click any area on the screen.
   The Live menu appears.
2. Click Spot Out.
   Supports the Spot output in Single screen with Auto Sequence mode.
   - The Spot output is supported only for a designated channel. For the Spot Out port of a model, refer to "**Part Names and Functions (Rear)**". (Page 9)

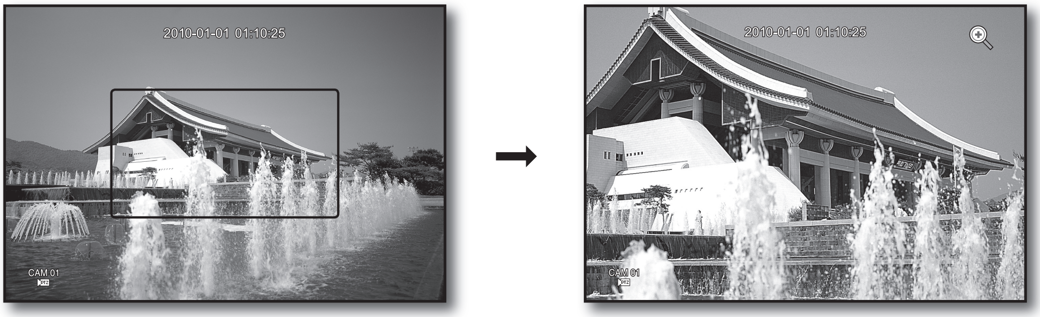

Scene Mode
Spot Out
Audio Off
Freeze
Stop Alarm
Record
Play
Search
Backup
Main Menu
Shutdown
Hide Launcher
Logout
Spot Out 1
Auto Sequence
Single
CH1
CH2
CH3
CH4
2010-01-01 01:10:25
CAM 01
CAM 02
CAM 03
CAM 04
2010-01-01
01:10:25

< Multichannel Live Menu >

ZOOM

This is available only in Single Live mode. In Single mode, select a desired area and use the Zoom function to enlarge it twice.

1. Select <**ZOOM**> in the right-click menu.
   Press the [**ZOOM**] button on the front panel or the remote control, or simply click < 🔍 > in the launcher menu. The zoom box appears.
2. Use the direction keys, or drag and drop to specify an area to enlarge.
3. Press the [**ENTER**] button, or double-click the selected area to enlarge it twice.
   - In the enlarged image, use the direction buttons (▲▼◄ ►) on the remote control or the front panel to move the enlarged area.
4. Press the [**ZOOM**] button on the front panel or the remote control, or simply click < 🔍 > in the launcher menu to release the zoom.


2010-01-01 01:10:25
CAM 01
2010-01-01 01:10:25
CAM 01

AUDIO ON/OFF

You can turn the sound on/off corresponding to the channel in Live mode.

AUDIO ON/OFF in Single mode

Click the audio icon (🔈) on the screen, or press the [**AUDIO**] button on the front panel or the remote control to turn it on/off.

- Only the channel where <**AUDIO**> is set to <**ON**> in "**Device** > **Camera**" displays the audio icon (🔈) in Live mode that you can use to turn the sound on/off.

FREEZE

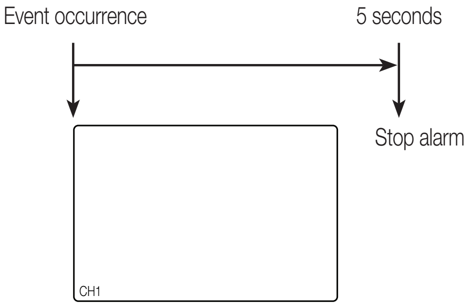
This is available only in Live mode, this pauses playing the Live image temporarily.

1. Press the [**FREEZE**] button on the front panel or the remote control, or click < Freeze > in the launcher menu.
   The playback of the image is stopped temporarily.
2. Press the [**FREEZE**] button again, or click < Freeze >.
   This will release the freeze.

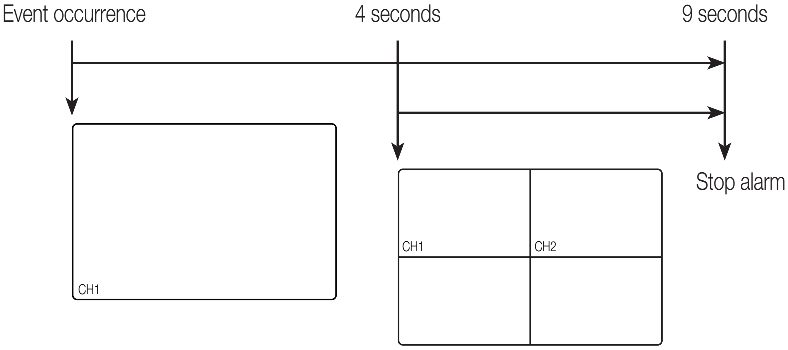
EVENT MONITORING

This will display the channel in sync with a specific event (Sensor/Motion/Video Loss) if it occurs.
In "**Monitor** > **Event Display**", set the event monitoring to ON/OFF and specify the event display time. (Page 48)

- If multiple events occur simultaneously, the screen will switch to a split mode.
  - 2~4 events : 4-split mode
- If the second event occurs within the set time of <**Event Display**>, the first event will last until the second one is terminated. (Page 48)
  - Ex : If you set <**Event Display**> to 5 seconds, and only one event occurs in CH 1.



- Ex : If you set <**Event Display**> to 5 seconds, and the second event occurs in CH 2 within the set time after the first event occurred in CH 1.


Event occurrence
4 seconds
9 seconds
Stop alarm
CH1
CH1
CH2

- Press the [**ALARM**] button to reset the alarm settings and to release the event mode.
- If an alarm activates in the condition you have set the event record, and pre/post alarm times, the event record will be performed.

using the DVR

You can setup the system properties, devices, and options for recording, event, backup and network.

SYSTEM SETUP

You can setup Date/Time/Language, Permission, System Properties and Log.

Date/Time/Language

You can check and setup the current Date/Time and time related properties, as well as the language used for the interface on the screen.

Setting the Date/Time/Language

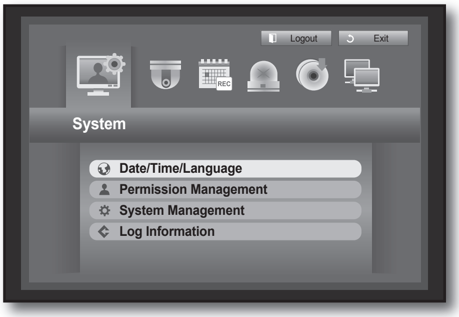
Set the Date/Time/Language

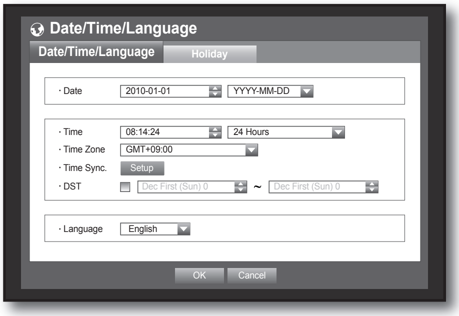
Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or on the front panel.
   - If not logged in, it prompts with login window.
     Refer to “**Login**”. (Page 22)

2010-01-01 01:10:25
CAM 01
CAM 02
CAM 03
CAM 04
2010-01-01
01:10:25

2. Use the left/right buttons (◄ ►) to select the <**System**>.
   System property setup menu is selected.
3. Use the up/down buttons (▲▼) to select <**Date/Time/Language**> and press the [**ENTER**] button.
4. Select <**Date/Time/Language**>.
   A dialog to setup Date, Time and Language.
5. Use direction buttons (▲▼◄ ►) to select an item to set and make your changes.




Date/Time/Language

Date/Time/Language | Holiday

· Date 2010-01-01 YYYY-MM-DD

· Time 08:14:24 24 Hours

· Time Zone GMT+09:00

· Time Sync. Setup

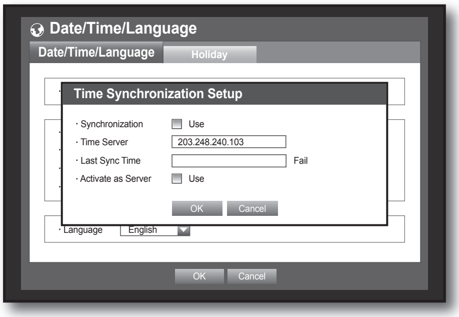
· DST ☐ Dec First (Sun) 0 ~ Dec First (Sun) 0

· Language English

OK Cancel

- Date : Sets the date that will appear on the screen.
  You can select the date format.
- Time : Sets the time and its format that will appear on the screen.
  Select either one from <**24 Hours, 12 Hours (AM/PM)**>.
- Time Zone : Sets the time zone of your area based on the Greenwich Mean Time (GMT).
  - GMT (Greenwich Mean Time) is standard World Time and the basis of world time zone.
- Time Sync. : You can set the DVR’s current time synchronized to a selected <**Time Server**> regularly if you select to use <**Time Server**>.
  In this case, <**Date/Time/Language**> setup does not allow time adjustment.

  - Time Server : Enter an IP or URL address of the time server.
  - Last Sync Time : Displays the most recent synchronization time from the selected time server.
  - Activate as Server : Set to <**Use**> to allow the DVR to act as a Time Server for other DVRs.
- DST : Set up Daylight Saving Time with its period to make the time earlier than the GMT of its time zone by 1 hour during the set period.
- Language : Select your language. Sets the language for the interface.
  English, French, German, Spanish, Italian, Chinese, Russian, Korean, Polish, Japanese, Dutch, Portuguese, Turkish, Czech, Danish, and Swedish are available.


Date/Time/Language
Date/Time/Language
Holiday
Time Synchronization Setup
OK
Cancel
OK
Cancel

· Synchronization ☐ Use
· Time Server 203.248.240.103
· Last Sync Time Fail
· Activate as Server ☐ Use
· Language English

6. When the Date/Time/Language setup is done, press <**OK**>.

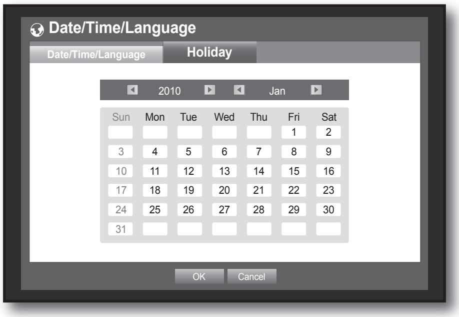
- You can also use numeric buttons on the remote control or front panel to enter values for Date, Time and other numeric fields.

Setting Holiday

You can set specific dates to Holidays according to your preferences.
Holidays are applied to <**Recording Schedule**> and <**Alarm Schedule**> too.

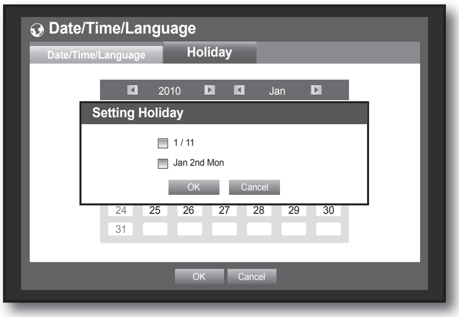
Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Date/Time/Language**> window to select <**Date/Time/Language**>, and press the [**ENTER**] button.
4. Select <**Holiday**>.
   A calendar for Holiday setup appears.
5. Use the left/right <◀ ▶> buttons to select year or month, and press the [**ENTER**] button.


Date/Time/Language
Date/Time/Language
Holiday
2010
Jan
OK
Cancel

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

6. Use direction buttons (▲▼◀ ▶) to select a desired date, and press the [**ENTER**] button.
   You will see the "**Setting Holiday**" screen.
   - Ex : Select January 11th and check on <**1/11**> only to make every January 11th a holiday. Check both on <**1/11**> and <**Jan 2nd Mon**> to make every January 11th and 2nd Monday of January holidays.
7. When the Holiday setup is done, press <**OK**>.


Date/Time/Language
Date/Time/Language
Holiday
2010
Jan
Setting Holiday
OK
Cancel
24
25
26
27
28
29
30
31
OK
Cancel

☐ 1 / 11
☐ Jan 2nd Mon

Using the Calendar

Using the mouse may help make setup easier.

① Select year and month.
Select the left/right <◀ ▶> key on the left/right side of year/month and press [**ENTER**] button to adjust by 1 year/month.

② Use direction buttons to select a date and press [**ENTER**] button.

- A date with recorded data to be searched will appear in yellow in the System Log, Event Log, Time Search and Event Search.

Permission Management

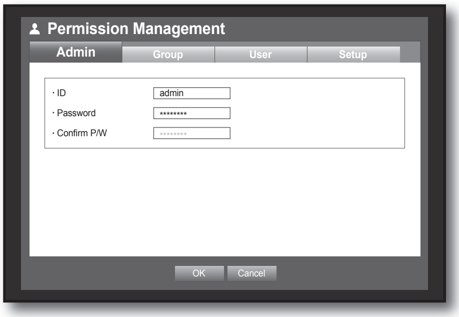
You can set permissions of each user over the DVR's specific function and settings.

Setting the Administrator

You can set and change Administrator’s ID and password.
The administrator can use and set all menu items and functions.

Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**System**> window to move to <**Permission Management**>, and press [**ENTER**] button.
4. Select <**Admin**>.
   A dialog for Admin ID and Password input appears.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the ID and password.

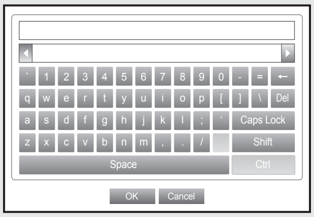


· ID admin
· Password ********
· Confirm P/W ********

- By default, initial ID and password are set to “**admin**”, and “**4321**”.

6. When the administrator setup is done, press <**OK**>.

Using Virtual Keyboard


` 1 2 3 4 5 6 7 8 9 0 - = ←
q w e r t y u i o p [ ] \ Del
a s d f g h j k l ; ' Caps Lock
z x c v b n m , . / Shift
Space
Ctrl
OK
Cancel

① For alphanumeric inputs, the virtual keyboard window appears.

② Use direction buttons (▲▼◄ ►) to move to a desired character, and press the [**ENTER**] button.

③ In the upper text input box of the virtual keyboard, there displays a list of candidate words containing the selected character.

④ Select a word from the list, or use the keyboard to enter the whole word.

- If there are many of candidate words, use < ◀, ▶ > buttons to move between them forward and backward.
- You can use mouse wheel and jog shuttle button too.

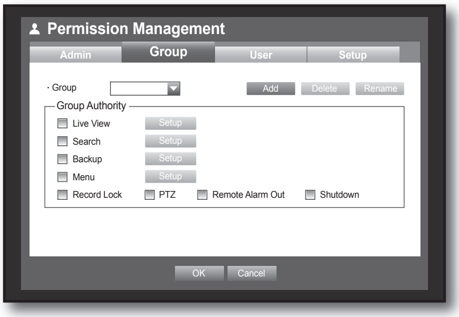
⑤ Select <**OK**>.
Entered word is applied.

- For upper case letters, use <**Caps Lock**> button.
- For special characters, use <**Shift**> button.
- Using the virtual keyboard is the same to a normal keyboard use in your region.
- You can enter only lower-case alphabets and numeric values for the user ID.
- For the password, use alphabets and special characters excluding < \ > and <**“**>.
- You can use number buttons on the remote control or front panel.

Setting the Group

You can create user groups and setup permissions for those user groups.
You can register a user for each group in <**User**>.

Using the mouse may help make setup easier.


Permission Management
Admin
Group
User
Setup
· Group
Add
Delete
Rename
Group Authority
☐ Live View
Setup
☐ Search
Setup
☐ Backup
Setup
☐ Menu
Setup
☐ Record Lock
☐ PTZ
☐ Remote Alarm Out
☐ Shutdown
OK
Cancel

3. Use the up/down buttons (▲▼) in <**System**> window to move to <**Permission Management**>, and press [**ENTER**] button.
4. Select <**Group**>.
   A window for <**Add**>, <**Delete**>, <**Rename**>, and <**Group Authority**> setup appears.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Add, Delete, Rename : You can add, delete, rename a group or modify the permissions given to the group.
  The virtual keyboard appears when <**Add**> or <**Rename**> was selected.
  You can add up to 10 groups.
  - Add : When you first run the DVR with the admin account, only the admin account exists. Add has already been deactivated. Select to display the virtual keyboard. Enter a group name. You can add up to 10 groups.
  - Delete : Deletes a user group that is already registered. Selecting Delete will delete all user accounts belonging to that group.
  - Rename : Renames a group that is already registered. Select <**Rename**> to display the virtual keyboard.
  - ■ For entering a group name, refer to "**Using Virtual Keyboard**". (Page 34)
- Group Authority : Sets permissions to access menu items of each group.
  Users of a group can access checked functions.

6. When the group setup is done, press <**OK**>.

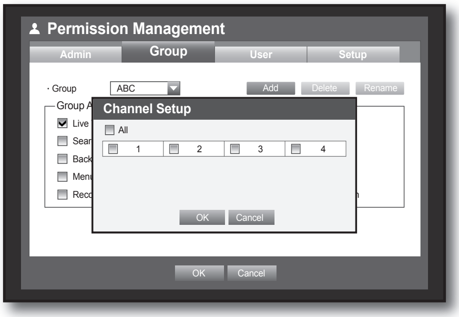
To set the group authority

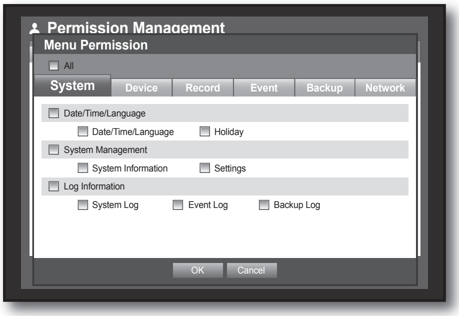
You can set the permissions of the group users to access the menu according to the channel.

1. Select a menu to which the group permission is assigned.
   The menu where the group permission is assigned will be displayed in the Live menu when a group user logs in.

- Live View : You can set the permission to access the Live screen according to the channel.
- Search : You can set the permission to access the Search menu according to the channel.
- Backup : You can set the permission to access the Backup menu according to the channel.
- Menu : You can set menus accessible with a specific permission.
  Group users can access the permitted menus only.
  Select a menu to display the Menu Permission screen.
- Record Lock, PTZ, Remote Alarm Out, Shutdown : Select an item so that the item will be added to the permissions.

2. Select <**OK**>.
   Select and assign a group user so that the user can access the specified menu.

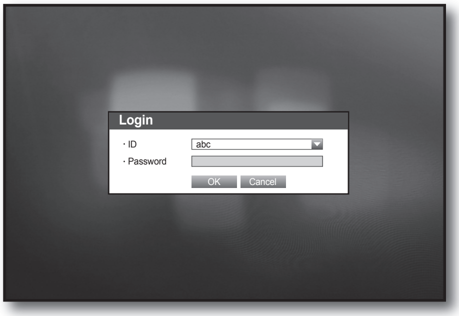

Permission Management
Admin
Group
User
Setup
· Group
ABC
Add
Delete
Rename
Group A
☑ Live
☐ Sear
☐ Back
☐ Menu
☐ Reco
Channel Setup
☐ All
☐ 1
☐ 2
☐ 3
☐ 4
OK
Cancel
OK
Cancel


Permission Management
Menu Permission
☐ All
System
Device
Record
Event
Backup
Network
☐ Date/Time/Language
☐ Date/Time/Language
☐ Holiday
☐ System Management
☐ System Information
☐ Settings
☐ Log Information
☐ System Log
☐ Event Log
☐ Backup Log
OK
Cancel

To restrict the user permissions

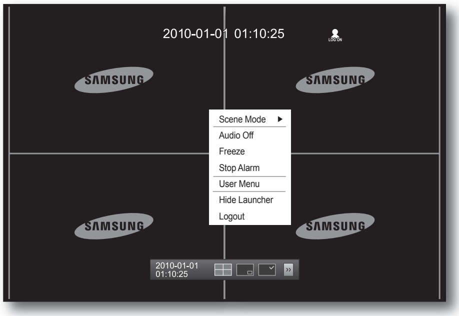
If the admin restricts all permissions of an added group, the users belonging to that group can access only the default minimum menus and can change the user's own password only.

1. Start the DVR.
   If all permissions are restricted, only the Login dialog should appear.
2. Log in with a registered user ID.


Login
· ID
· Password
OK
Cancel

ID: abc

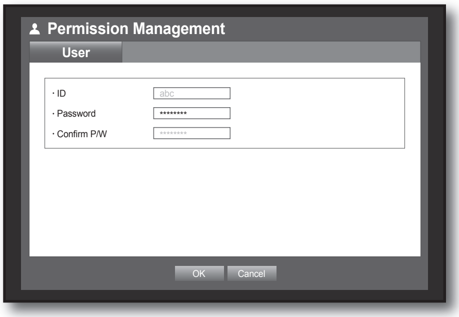
3. Right-click any area on the screen.
   If all permissions are restricted, only the accessible context menus should appear.


2010-01-01 01:10:25
LOG ON
SAMSUNG
SAMSUNG
Scene Mode ▶
Audio Off
Freeze
Stop Alarm
User Menu
Hide Launcher
Logout
SAMSUNG
SAMSUNG
2010-01-01
01:10:25

To change the user password

If you log in with a user account that is restricted to access the menu, you can change your own password only.

1. Log in with your account.
2. Select <**User Menu**>.
   The Permission Management setup screen appears.
3. Select <**Permission Management**>.
   The Password setup dialog appears.
4. Enter a new password.
5. Select <**OK**>.
   You change to the password will be applied.

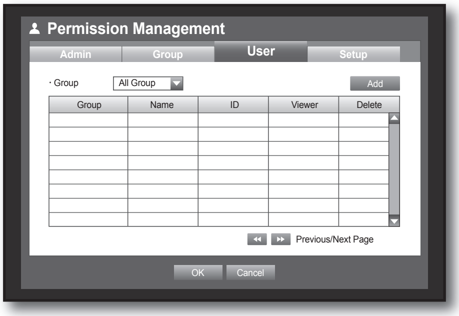

Permission Management
User
· ID
· Password
· Confirm P/W
OK
Cancel

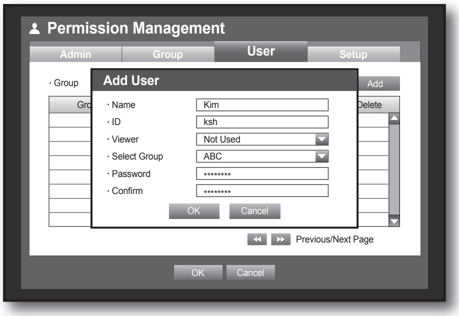
ID: abc
Password: ********
Confirm P/W: ********

Setting the User

Users can be added only if a group was created in <**Group**> menu.

Using the mouse may help make setup easier.


Permission Management
Admin
Group
User
Setup
· Group
All Group
Add
Group
Name
ID
Viewer
Delete
Previous/Next Page
OK
Cancel


Permission Management
Admin
Group
User
Setup
· Group
Add
Add User
Delete
OK
Cancel
Previous/Next Page
OK
Cancel

· Name Kim
· ID ksh
· Viewer Not Used
· Select Group ABC
· Password ********
· Confirm ********

3. Use the up/down buttons (▲▼) in <**System**> window to move to <**Permission Management**>, and press [**ENTER**] button.
4. Select <**User**>.
   A window for Add User appears.
5. Use direction buttons (▲▼◄ ►) to select <**Add**> from the window.
   A window for "**Add User**" appears.
   You can configure the Network Viewer settings including name, ID, viewer, Select Group and password.
   Result of the user setup appears in the <**User**> window.
   To change the user property, use "**Edit User**".
   The "**Edit User**" window appears when you select a desired item to be changed in the <**User**> window.

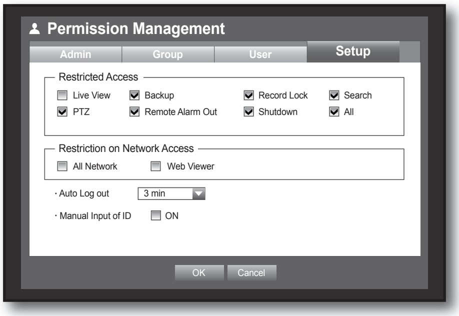
- Viewer : If you select <**Use**>, you will be given access to the Web Viewer and Network Viewer.
  - Refer to "**Connecting Web Viewer**". (Page 71)
  - For more information about use of Network Viewer, refer to the Network Viewer's user guide. (Page 8)

6. When the user setup is done, press <**OK**>.

Setting Permissions

You can set restricted access for all general users.
Items with restrictions will require logging in for use.

Using the mouse may help make setup easier.


Permission Management
Admin
Group
User
Setup
Restricted Access
Restriction on Network Access
OK
Cancel

☐ Live View ☑ Backup ☑ Record Lock ☑ Search
☑ PTZ ☑ Remote Alarm Out ☑ Shutdown ☑ All

☐ All Network ☐ Web Viewer

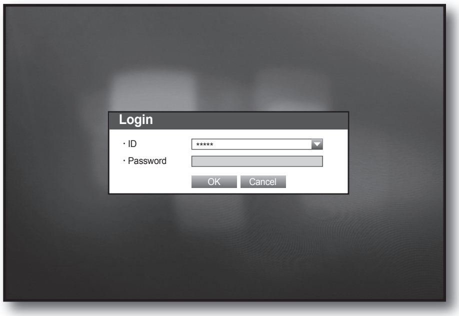
· Auto Log out 3 min
· Manual Input of ID ☐ ON

3. Use the up/down buttons (▲▼) in <**System**> window to move to <**Permission Management**>, and press [**ENTER**] button.
4. Select <**Setup**>.
   The Restricted Access, Restriction on Network Access, Auto Log out, Manual Input of ID setup screen appear.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Restricted Access : All menu items allowed for a user can be set with restricted access.
  - Checked (☑) : Restricted
  - Not checked (☐) : Accessible
  - If it is not checked (☐) in <**Restricted Access**>, any user can access the item no matter what the <**Group Authority**> setting.
  - If it is checked (☑) in <**Restricted Access**>, a user can access the item only if the user has permission in <**Group Authority**> setting.
- Restriction on Network Access : Restricts remote access from a <**Restricted Access**> network.
  - All Network : Restricts all access instances via Network Viewer and Web Viewer.
  - Web Viewer : Restricts access via the Web Viewer.
- Auto Log out : A user will be automatically logged out if there is no operation on DVR for over set period of time.

- Manual Input of ID : Prompts you to enter the user ID manually for the login process.
  - Checked (☑) : Encloses the registered user IDs with the [*] symbols.
    Use the virtual keyboard to enter the user ID.

6. When the permission setup is done, press <**OK**>.



· ID *****

· Password

System Management

You can check the system version, update to a newer version, as well as data backup and initialization.

Checking the System Information

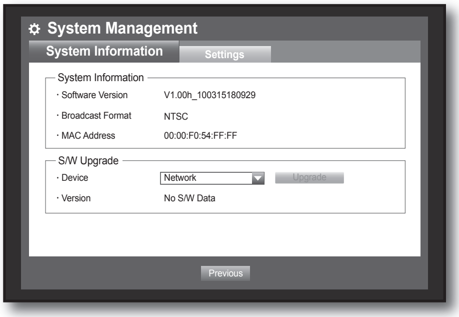
You can check the current system version, broadcasting system, MAC address. You can update the system.

Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**System**> window to move to <**System Management**>, and press [**ENTER**] button.

4. Check the Version, Broadcast Format, and MAC Address.

- System Information : Shows the current system's information.
  The values can not be changed by a user.
- S/W Upgrade : Updates the DVR's software up to date.



System Information

· Software Version V1.00h_100315180929

· Broadcast Format NTSC

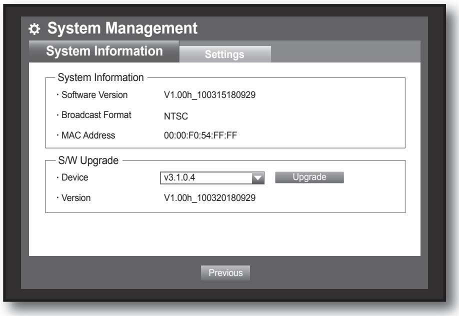
· MAC Address 00:00:F0:54:FF:FF

S/W Upgrade

· Device Network

· Version No S/W Data

- ■ Ex : If you connect to a storage device that has upgradable software installed, and return to the <**System Management**> menu, the current software version will be displayed.



System Information

· Software Version V1.00h_100315180929

· Broadcast Format NTSC

· MAC Address 00:00:F0:54:FF:FF

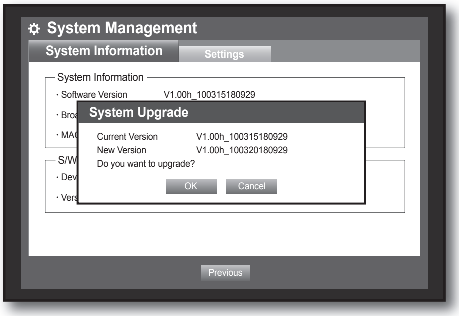
S/W Upgrade

· Device v3.1.0.4

· Version V1.00h_100320180929

- **Updating the Software**

1. Connect a device storing the software to be updated.
   (It may take about 10 seconds to recognize the device.)
   - ■ Upgradeable devices include USB memory, CD/DVD and network device.
   - ■ To update the network, the current DVR should have been connected to the network.
     Upgrade via the proxy server may not be enabled due to the restricted access.


System Management
System Information
Settings
System Information
S/W
OK
Cancel
Previous

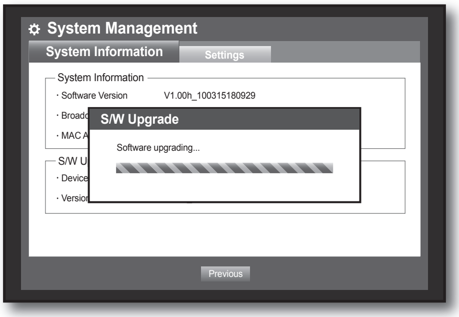
· Software Version V1.00h_100315180929

System Upgrade

Current Version V1.00h_100315180929
New Version V1.00h_100320180929
Do you want to upgrade?

2. Select <**System Management**> from <**System**> window.
3. Select <**System Information**>.
4. When the recognized device appears, select <**Upgrade**>.
   - ■ The <**Upgrade**> button will be activated only if the current <**Software Version**> of the <**System Information**> is same to or older than that of <**S/W Upgrade**>.
5. Press <**OK**> in the “**System Upgrade**” window.
   - ■ While updating, it shows the progress.

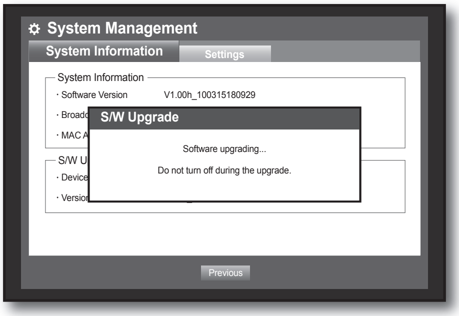
- Updating progresses with 3 steps as shown in the figure.


System Management
System Information
Settings
System Information
S/W U
Previous

· Software Version V1.00h_100315180929

S/W Upgrade

Software upgrading...


System Management
System Information
Settings
System Information
S/W U
Previous

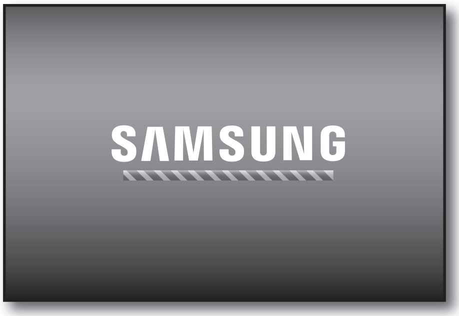
· Software Version V1.00h_100315180929

S/W Upgrade

Software upgrading...

Do not turn off during the upgrade.

6. When the updating is done, it automatically restarts.
   Do not turn the power off until it finishes restarting.



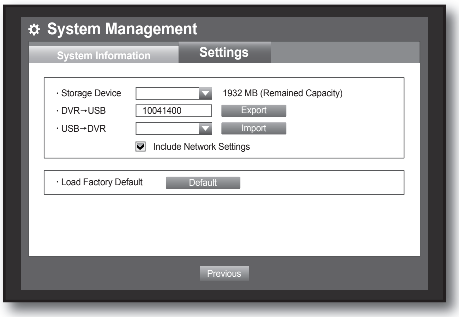
- ■ If “**Upgrade Failed**” appears, retry from the step 4.
  When you experience continued failure, consult the service center for assistance.

Settings

You can copy and import the DVR settings by using a storage media.

Using the mouse may help make setup easier.

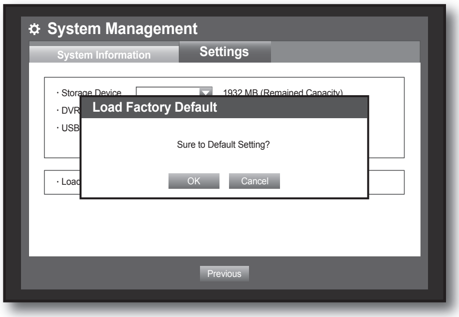
3. Use the up/down buttons (▲▼) in <**System**> window to move to <**System Management**>, and press [**ENTER**] button.
4. Select <**Settings**>.
   A window of storage device and load factory default appears.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and export or import settings data to a storage device.


System Management
System Information
Settings
Storage Device
DVR→USB
USB→DVR
Export
Import
Load Factory Default
Default
Previous

· Storage Device: 1932 MB (Remained Capacity)
· DVR→USB: 10041400
☑ Include Network Settings

- Storage Device : Shows the connected storage device.
- Export : Exports DVR settings to the connected storage device.
- Import : Imports DVR settings from the storage device and applies to the DVR.
  - ■ If <**Include Network Settings**> is checked, the network settings will be imported too.
- Load Factory Default : If <**Default**> is selected, a confirmation dialog for "**Load Factory Default**" prompts. Press <**OK**> to initialize the system to the factory default.

6. To move to the previous menu, press <**Previous**>.


System Management
System Information
Settings
Load Factory Default
OK
Cancel
Previous

Sure to Default Setting?

Log Information

You can browse logs on the system and events.

System Log

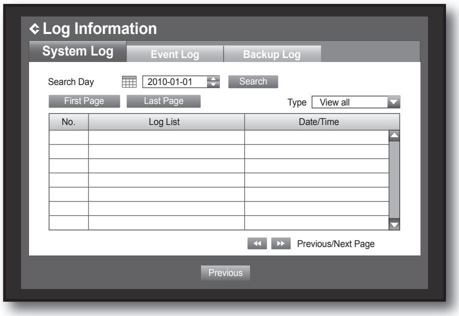
System Log shows log and timestamp on every system start up, system shutdown, and changes on system settings.

Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**System**> window to move to <**Log Information**>, and press [**ENTER**] button.
4. Select <**System Log**>.
   - ■ Refer to "**Using the Calendar**". (Page 33)
     Click on the calendar <▦> to display the calendar window.

- Type : When there are too many logs, you can display logs of the desired format by selecting the type.

5. Use direction buttons (▲▼◄ ►) to move to a desired item, and press <**Search**>.


Log Information
System Log
Event Log
Backup Log
Search
First Page
Last Page
No.
Log List
Date/Time
Previous/Next Page
Previous

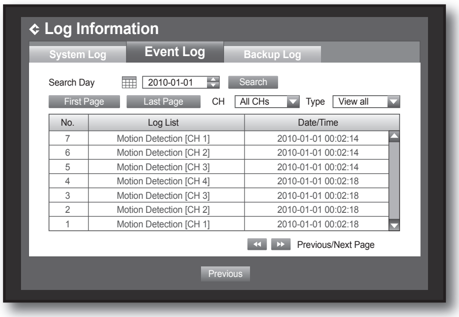
Search Day: 2010-01-01
Type: View all

Event Log

Event log shows recorded events on alarms, motion detections and video loss.
It also shows the log and its timestamp.

Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**System**> window to move to <**Log Information**>, and press [**ENTER**] button.
4. Select <**Event Log**>.
5. Use direction buttons (▲▼◄ ►) to move to the desired item.
6. Set Search Day, Channel and Type and the press <**Search**>.
   - ■ Refer to "**Using the Calendar**". (Page 33)
     Click on the calendar <▦> to display the calendar window.


◇ Log Information
System Log
Event Log
Backup Log
Search
First Page
Last Page
Previous/Next Page
Previous

Search Day 2010-01-01

CH All CHs

Type View all

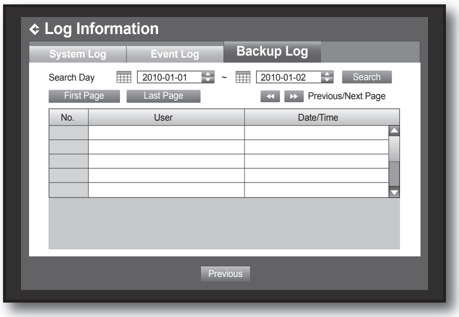
No.	Log List	Date/Time
7	Motion Detection [CH 1]	2010-01-01 00:02:14
6	Motion Detection [CH 2]	2010-01-01 00:02:14
5	Motion Detection [CH 3]	2010-01-01 00:02:14
4	Motion Detection [CH 4]	2010-01-01 00:02:18
3	Motion Detection [CH 3]	2010-01-01 00:02:18
2	Motion Detection [CH 2]	2010-01-01 00:02:18
1	Motion Detection [CH 1]	2010-01-01 00:02:18

Backup Log

You can find out who backed up and the details (backup time, channel, device to use, file format, etc.).

Using the mouse may help make setup easier.

3. In the <**System**> window, press the up/down (▲▼) button to move to <**Log Information**> and press the [**ENTER**] button.
4. Select <**Backup Log**>.
5. Use the four direction buttons (▲▼◄ ►) to move to a desired item.
6. Specify a search term and select <**Search**> in the right corner.
   Backup details for the search term will be listed.


◇ Log Information
System Log
Event Log
Backup Log
Search
First Page
Last Page
Previous/Next Page
Previous

Search Day 2010-01-01 ~ 2010-01-02

No.	User	Date/Time

SETTING THE DEVICE

You can setup Camera, Storage Device, Remote Device, POS Device and Monitor.

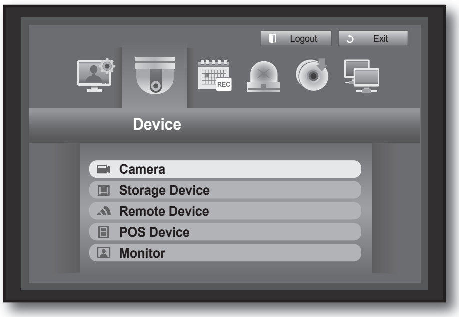
Camera

Setting the Camera

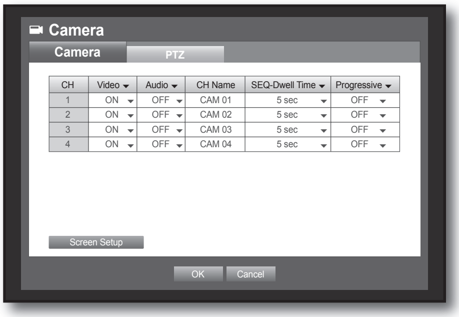
You can set Video, Audio, Channel Name and Dwell Time of a Camera.

Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Device**>.
   Device setting menu is selected.
3. Use the up/down buttons (▲▼) to move to <**Camera**>, and press [**ENTER**] button.



4. Select <**Camera**>.
   You will see a window where you can configure the camera settings including Video, Audio, Channel Name, Dwell Time and Progressive.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.



CH	Video	Audio	CH Name	SEQ-Dwell Time	Progressive
1	ON	OFF	CAM 01	5 sec	OFF
2	ON	OFF	CAM 02	5 sec	OFF
3	ON	OFF	CAM 03	5 sec	OFF
4	ON	OFF	CAM 04	5 sec	OFF

- Video
  - <**ON/OFF**> : You can turn ON/OFF the selected channel's camera.
  - <**Covert1**> : Shows information other than the video of the selected channel.
    - ■ For privacy protection, it does not display the video while the recording continues.
  - <**Covert2**> : Shows nothing but an empty screen while the recording continues.

- Audio
  - If set to <**ON**>, you can turn the audio of the channel ON/OFF on the Live screen.
  - If set to <**OFF**>, the channel's audio is off on the Live screen and not recorded.
    - ■ Audio output is available for only 1 channel.

- CH Name : Up to 15 characters including blanks are allowed.
  - ■ Refer to "**Using Virtual Keyboard**". (Page 34)

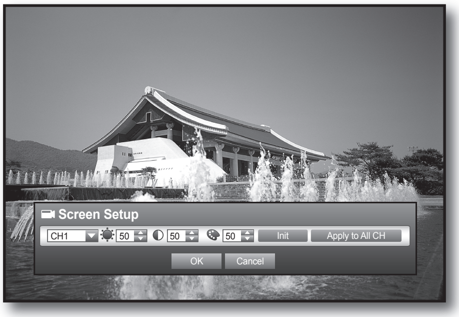
- SEQ-Dwell Time : You can set the dwell time between channels for the Live screen and Spot Out.
  - ■ If set to <**OFF**>, the channel is not listed in the Auto Sequence mode.

- Progressive : You can set the progressive camera to ON/OFF.

■ If you set it to <**ON**> for the progressive camera, screen flickering will be reduced.

- Screen Setup : The video appeared on the screen may vary depending on the channel's camera, configure the DVR display to your preferences.
  Select a channel and adjust the <☀**(Brightness)**>, <◐**(Contrast)**>, and <**(Color)**> of the selected channel.
- Press the <**Init**> to initialize settings back to the default 50.

6. When the camera setup is done, press <**OK**>.



Setting the PTZ

To use Camera's PTZ functions, ID and protocols of each camera and DVR should be matched.
For other settings, refer to the "**Remote Devices**" settings. (Page 46)

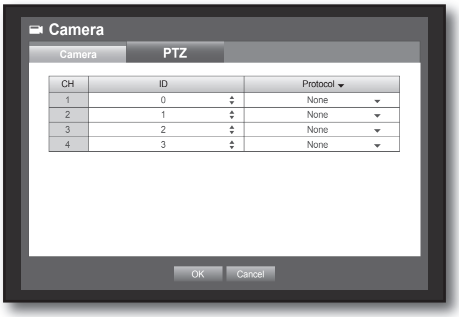
Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Camera**>, and press [**ENTER**] button.

4. Select <**PTZ**>.
A window of PTZ settings appears.

5. Use direction buttons (▲▼◄ ►) to move to a desired item, and select it.

- ID : Set the ID of the connected camera of each channel. You can easily setup by using the numeric buttons on the remote control or front panel.
- Protocol : Set the protocol of the connected camera of each channel.



CH	ID	Protocol
1	0	None
2	1	None
3	2	None
4	3	None

■ You can check the camera's ID and protocol if you turn the camera off and on after connecting it to the DVR. (Page 65)

6. When the PTZ setup is done, press <**OK**>.

Storage Device

You can check information on storage devices.

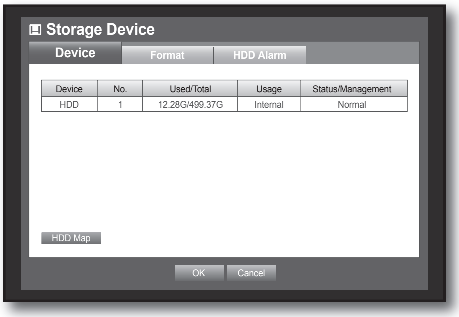
Confirming Devices

You can check storage devices and their free space, usage as well as status.
Devices available are HDD, and USB devices (Memory, HDD, CD/DVD).
Refer to “**Product Specifications** > **Backup**”. (Page 96)

Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Storage Device**>, and press [**ENTER**] button.

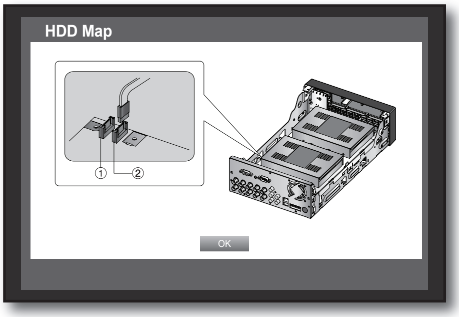
4. Select <**Device**>.



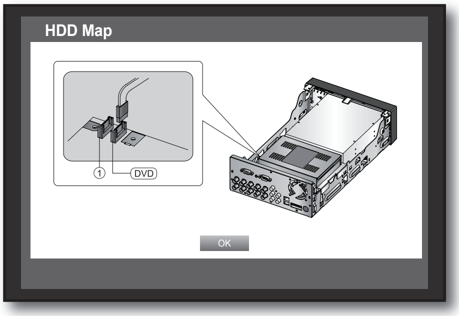
Device	No.	Used/Total	Usage	Status/Management
HDD	1	12.28G/499.37G	Internal	Normal

- No. : Shows the assigned number of the internal HDD.
  - ■ To see the detailed positioning of the HDD according to the number, refer to <**HDD Map**>.
- Used/Total : Shows the used/total capacity of the storage device.
- Usage : Sets the storage device’s usage.
  - USB memory and storage media such as CD/DVD are used for backup purpose only.
- Status/Management : Shows the current status of the HDD, as in Normal/Check/Replace.
  - Normal : Available to use
  - Check : Available to use but recommended to replace
  - Replace : Requires immediate replacement.
- HDD Map : Shows the internal HDD’s locations according to assigned numbers.
  - ■ Refer to this for servicing or additional HDD installation.

5. To move to the previous menu, press <**OK**>.



<SRD-470>



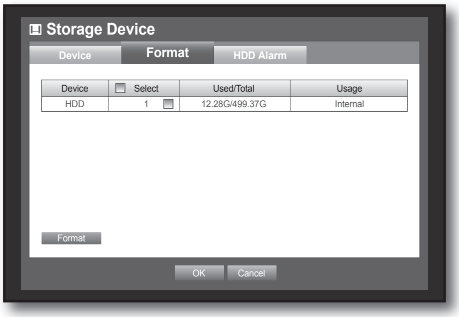
<SRD-470D>

Formatting

You can format a storage device.

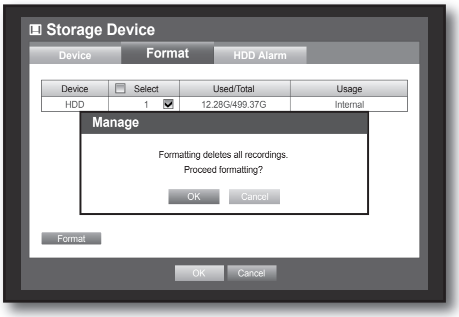
Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Storage Device**>, and press [**ENTER**] button.
4. Select <**Format**>.
   A window for selection of device for formatting appears.
5. Use direction buttons (▲▼◄ ►) to select a device to be formatted.



Device	☐ Select	Used/Total	Usage
HDD	1 ☐	12.28G/499.37G	Internal

6. Select <**Format**> on the bottom of the screen.
   Press <**OK**> on the “**Manage**” confirmation window will start formatting the selected device.
7. When the formatting is done, press <**OK**>.



Device	☐ Select	Used/Total	Usage
HDD	1 ☑	12.28G/499.37G	Internal

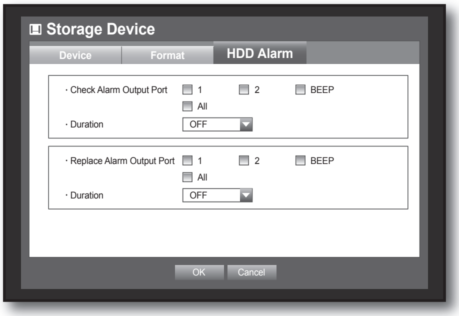
Formatting deletes all recordings.
Proceed formatting?

HDD Alarm

You can set alarm settings for HDD defects such as Check Alarm Output Port, Replace Alarm Output Port, and its duration.

Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Storage Device**>, and press [**ENTER**] button.
4. Select <**HDD Alarm**>.
   A window for setting HDD check and replace output ports and their durations appears.
5. Use direction buttons (▲▼◄ ►) to move to the desired item.



· Check Alarm Output Port ☐ 1 ☐ 2 ☐ BEEP ☐ All
· Duration OFF
· Replace Alarm Output Port ☐ 1 ☐ 2 ☐ BEEP ☐ All
· Duration OFF

- Alarm
  - Alarm signal will output through the alarm out port on the rear side when selected <**1**>, <**2**>.
  - If <**BEEP**> was selected, a beep will sound.
  - If <**All**> was selected, both beep sound and alarm signal through rear side ports will output.
- Check Alarm Output Port : If HDD generates check alarm, the alarm signal will output to the specified alarm output port.
- Replace Alarm Output Port : If HDD generates replace alarm, the alarm signal will output to the specified alarm output port.

- Duration : Sets the alarm duration for the alarm signal and beep sound.
  - If <**BEEP**> was selected, a beep will sound.
  - If <**All**> was selected, both beep sound and alarm signal through rear side ports will output.

- <**Check**> status means that the HDD is operating but it has problems that require technical examination. ( ) appears on the Live screen.
- <**Replace**> status means that the HDD has defect and requires immediate replacement. ( ) appears on the Live screen.

6. When the HDD Alarm setup is done, press <**OK**>.

Remote Devices

You can set the RS-485 communication for use of PTZ Camera and system keyboard with the DVR.

Using the mouse may help make setup easier.

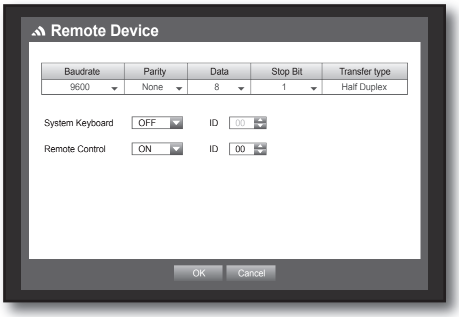
3. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Remote Device**>, and press [**ENTER**] button.

4. Use direction buttons (▲▼◄ ►) to move to the desired item, and press [**ENTER**] button.

5. Set the values of each communication setup of the remote device.

- Baudrate : Baud rate settings of the DVR, PTZ camera and system keyboard should be matched for proper operations.

6. Make sure to match IDs of the DVR, System Keyboard and Remote Control, and press <**OK**>.



Baudrate	Parity	Data	Stop Bit	Transfer type
9600	None	8	1	Half Duplex

System Keyboard OFF ID 00

Remote Control ON ID 00

- For changing the remote control's ID, refer to "**Changing the Remote Control ID**". (Page 12)

POS Devices

You can set properties of POS devices connected to the DVR.
A POS device connection requires channel, preset, and Port/Ethernet settings.

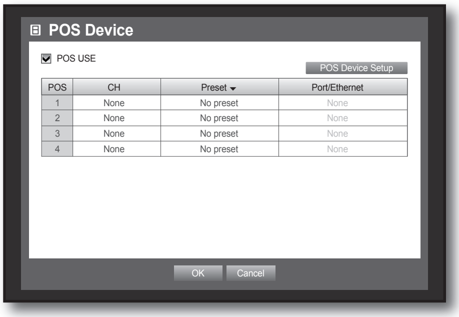
Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Device**> window to move to <**POS Device**>, and press [**ENTER**] button.

4. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- POS USE : When selected <**POS USE**>, DVR and POS will be connected.

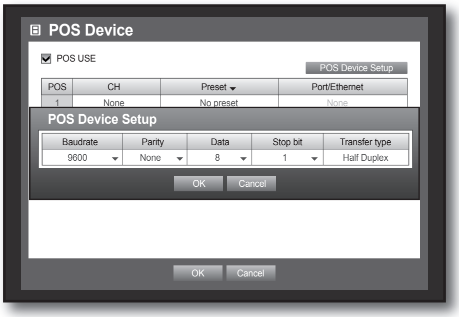
- If you change settings for the device and press <**OK**> while the <**POS USE**> is not checked, the changes for POS device will not be saved.



☑ POS USE

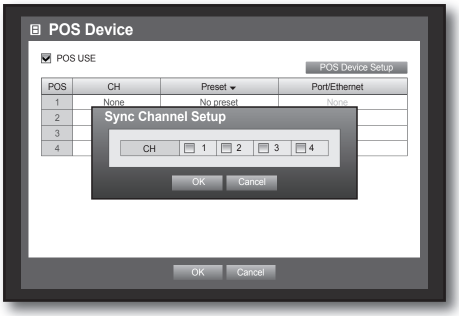
POS	CH	Preset	Port/Ethernet
1	None	No preset	None
2	None	No preset	None
3	None	No preset	None
4	None	No preset	None

- POS Device Setup : Sets the communication setups for the POS device and DVR.
  - ■ It is independent to the Remote Device setup.

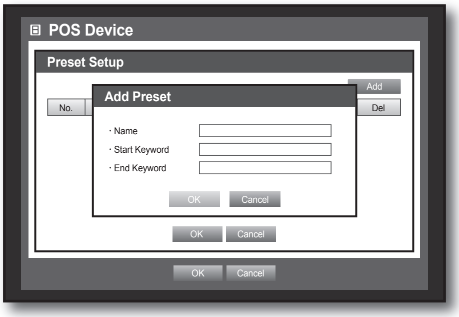

POS Device
☑ POS USE
POS Device Setup
POS
CH
Preset
Port/Ethernet
1
None
No preset
None
POS Device Setup
OK
Cancel
OK
Cancel

Baudrate	Parity	Data	Stop bit	Transfer type
9600	None	8	1	Half Duplex

- CH : Select the camera to be synchronized to the POS device.
  - ■ If selected a channel input field, “**Sync Channel Setup**” window appears.
  - ■ One POS device can be synchronized to up to 4 cameras (channels), however one channel cannot be synchronized to multiple POS devices.
  - ■ Channels to be synchronized to a POS device should be set to “**Event**” in “**Main Menu** > **Record** > **Recording Schedule**”. (Page 50)


POS Device
☑ POS USE
POS Device Setup
POS
CH
Preset
Port/Ethernet
1
2
3
4
None
No preset
None
Sync Channel Setup
CH
☐ 1
☐ 2
☐ 3
☐ 4
OK
Cancel
OK
Cancel

- Preset : Sets the name, start and end strings of the receipt for the preset.
  - ■ Preset name should be unique.
  - ■ Use <**Add**> button to display “**Add Preset**” window, and set its name, start string, and end string.


POS Device
Preset Setup
Add
No.
Del
Add Preset
· Name
· Start Keyword
· End Keyword
OK
Cancel
OK
Cancel
OK
Cancel

- Port/Ethernet : Sets the port number for the DVR and POS device connection.
  - ■ COM1 : For RS-232C connections
  - ■ 7001~7016 : For Ethernet connections

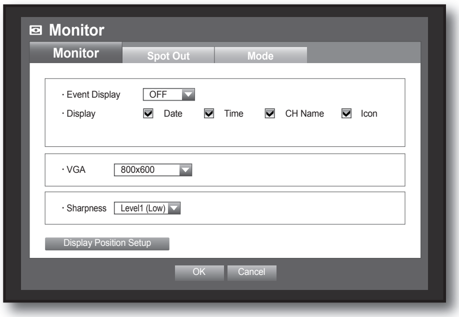
5. When the POS Device setup is done, press <**OK**>.

Monitor

You can configure information to be displayed and its format for Spot Out monitor.

Setting the Monitor

Using the mouse may help make setup easier.



· Event Display OFF
· Display ☑ Date ☑ Time ☑ CH Name ☑ Icon
· VGA 800x600
· Sharpness Level1 (Low)

3. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Monitor**>, and press [**ENTER**] button.

4. Select <**Monitor**>.

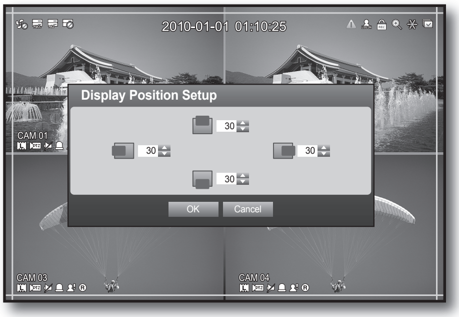
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Event Display : Sets the dwell time of the event channel display on the monitor when an event occurs.
  If selected <**Continuous**>, it displays the channel until you press [**ALARM**] button to release it.
- Display : Displays only checked items on the monitor screen.
- VGA : The current monitor may not display the video if the <**VGA**> settings do not match with this player
- Sharpness : You can adjust the sharpness of the video output signal.

6. When the monitor setup is done, press <**OK**>.

Setting Display position

Some monitors many not display information (camera name, icon, time information, etc.) about the DVR, depending on the condition. Then, you can change the display position of the data.



3. In the <**Device**> window, press the up/down (▲▼) button to move to <**Monitor**> and press the [**ENTER**] button.

4. Select the <**Monitor**> item.

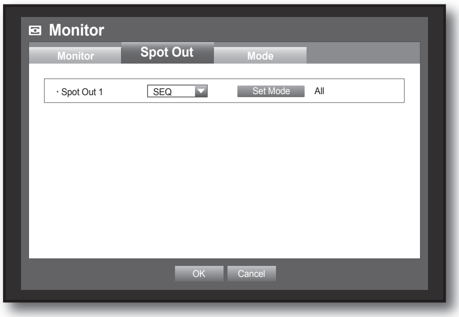
5. Select <**Display Position Setup**> in the bottom.
You will move to the <**Display Position Setup**> window.

6. Use the four direction buttons or the number buttons on the front panel or the remote control to adjust the data position.

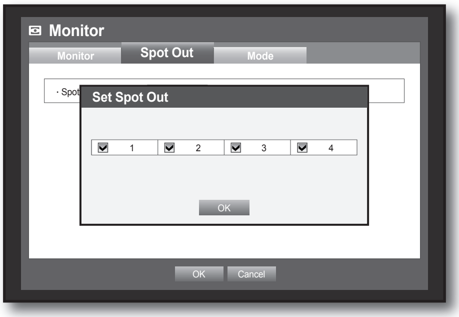
Setting the Spot Out

You can set the DVR to output information / video apart from the monitor out.

Using the mouse may help make setup easier.


Monitor
Monitor
Spot Out
Mode
· Spot Out 1
SEQ
Set Mode
All
OK
Cancel

3. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Monitor**>, and press [**ENTER**] button.
4. Select <**Spot Out**>.
   - The number of Spot Out terminals differs according to the model.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.


Monitor
Monitor
Spot Out
Mode
· Spot
Set Spot Out
☑ 1
☑ 2
☑ 3
☑ 4
OK
OK
Cancel

- Spot Out 1 : You can select between Auto Sequence, and Single.
- Set Mode : A window for "**Set Spot Out**" appears and you can set the channel for it.
  You can set the dwell time between the screen switching in "**Setting the Device** > **Camera** > **SEQ-Dwell Time**". (Page 42)

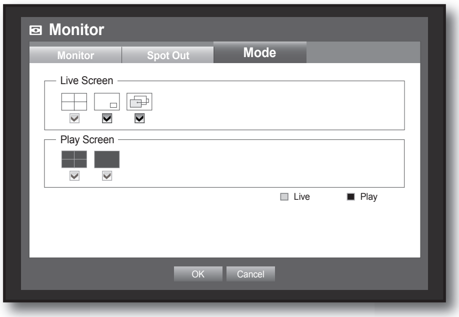
- You can setup using the mouse right button in Live screen. Refer to "**Spot Out**". (Page 29)

6. When the Spot Out is done, press <**OK**>.

Setting the Screen Mode

You can configure the Live screen and Split Screens.

Using the mouse may help make setup easier.


Monitor
Monitor
Spot Out
Mode
Live Screen
Play Screen
Live
Play
OK
Cancel

3. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Monitor**>, and press [**ENTER**] button.
4. Select <**Mode**>.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Live Screen : Select split modes for the Live screen.
  4-split screens are included by default.
- Play Screen : Select split modes for the playback screen.
  Single screen and 4-split screen are provided by default.

6. When the screen mode setup is done, press <**OK**>.

SETTING THE RECORDING

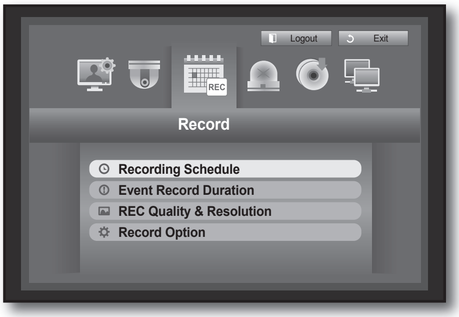
You can setup scheduled recording, event recording and other recording related settings.

Recording Schedule

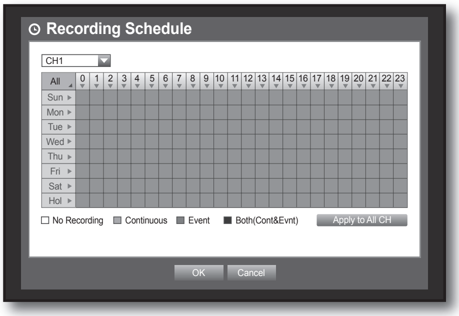
Make your reservation on a date and time to schedule the recording on specified time.

Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Record**>. Record menu is selected.
3. Use the up/down buttons (▲▼) to move to <**Recording Schedule**>, and press [**ENTER**] button.

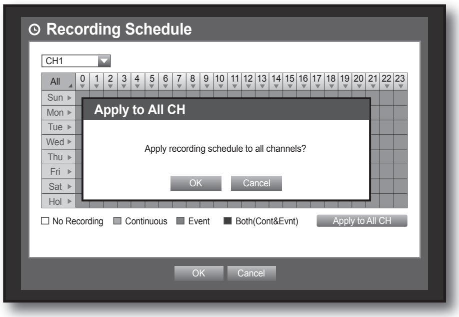

Logout
Exit
REC
Record
Recording Schedule
Event Record Duration
REC Quality & Resolution
Record Option

4. Select <**Recording Schedule**>. A window of scheduled recording setup appears.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.


Recording Schedule
CH1
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Hol
☐ No Recording
Continuous
Event
Both(Cont&Evnt)
Apply to All CH
OK
Cancel

- Apply to All CH : If selected <**Apply to All CH**>, "**Apply to All CH**" window appears. Press <**OK**> to apply the setup to all channels.

6. When the recording schedule setup is done, press <**OK**>.


Recording Schedule
CH1
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Hol
Apply to All CH
OK
Cancel
☐ No Recording
Continuous
Event
Both(Cont&Evnt)
Apply to All CH
OK
Cancel

Apply recording schedule to all channels?

Recording Color Tags

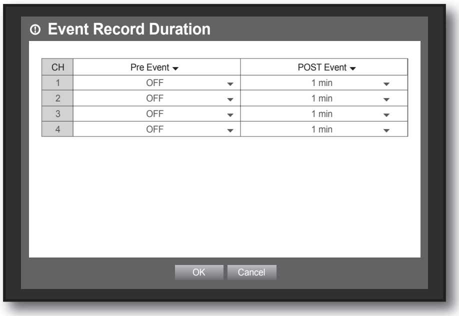
Color	Function	Description
White	No Recording	No schedule / event recording
Orange	Continuous	Scheduled recording only
Blue	Event	Event recording only
Green	Both(Cont&Evnt)	Both scheduled / event recordings

Each press of a selected cell will cycle through <**No Recording**>-<**Continuous**>-<**Event**>-<**Both(Cont&Evnt)**>.

Event Record Duration

You can set the beginning and ending point of a recording on an event.

Using the mouse may help make setup easier.



CH	Pre Event ▾	POST Event ▾
1	OFF ▾	1 min ▾
2	OFF ▾	1 min ▾
3	OFF ▾	1 min ▾
4	OFF ▾	1 min ▾

3. Use the up/down buttons (▲▼) in <**Record**> window to move to <**Event Record Duration**>, and press [**ENTER**] button.
4. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Pre Event : The recording of an event will start at a pre-determined time prior to the actual occurrence of the event. If it is set to 5 seconds, the recording begins from 5 seconds before the event.
- POST Event : The recording will continue for a pre-determined time after the actual end of an event. If it is set to 5 seconds, the recording ends in 5 seconds after an event.

5. When the event recording duration setup is done, press <**OK**>.

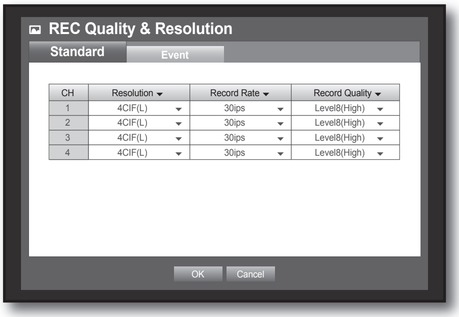
REC Quality / Resolution

You can set resolution, IPS, and quality of recordings by channel, and by recording type of standard / event.

Setting Standard Recording Properties

You can set each channel's resolution, quality and IPS for normal recordings.

Using the mouse may help make setup easier.



CH	Resolution ▾	Record Rate ▾	Record Quality ▾
1	4CIF(L) ▾	30ips ▾	Level8(High) ▾
2	4CIF(L) ▾	30ips ▾	Level8(High) ▾
3	4CIF(L) ▾	30ips ▾	Level8(High) ▾
4	4CIF(L) ▾	30ips ▾	Level8(High) ▾

3. Use the up/down buttons (▲▼) in <**Record**> window to move to <**REC Quality & Resolution**>, and press [**ENTER**] button.
4. Select <**Standard**>.
5. When the recording setup is done, press <**OK**>.

Setting Event Recording Properties

You can set each channel's resolution, quality and IPS for event recordings.

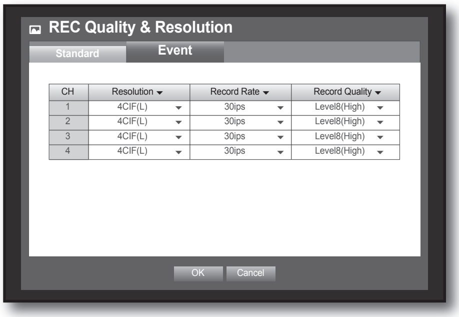
Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Record**> window to move to <**REC Quality & Resolution**>, and press [**ENTER**] button.

4. Select <**Event**>.
Event recording setup window appears.

5. Use direction buttons (▲▼◄ ►) to move to a desired item, and select it.

- Resolution : Sets the resolution of the recorded screen.



CH	Resolution	Record Rate	Record Quality
1	4CIF(L)	30ips	Level8(High)
2	4CIF(L)	30ips	Level8(High)
3	4CIF(L)	30ips	Level8(High)
4	4CIF(L)	30ips	Level8(High)

Resolution

Name	Resolution	Description
CIF(S)	NTSC: 352 X 240, PAL: 352 X 288	Samples each half of horizontal and vertical screen.
2CIF(M)	NTSC: 704 X 240, PAL: 704 X 288	Samples half of the horizontal screen.
4CIF(L)	NTSC: 704 X 480, PAL: 704 X 576	Samples original screen size.

- Record Rate : Image Per Second, means the frames recorded per a second.
- Record Quality : Sets the recording quality.

6. When the Event recording setup is done, press <**OK**>.

Record Option

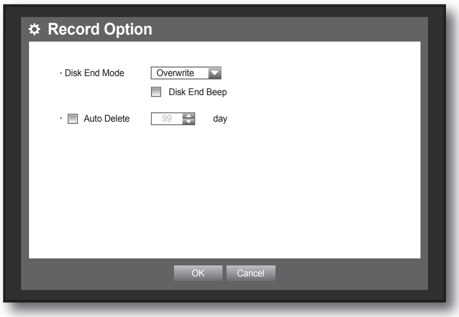
You can set the recording to stop or overwrite when the HDD is full.

Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Record**> window to move to <**Record Option**>, and press [**ENTER**] button.

4. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Disk End Mode : If selected <**Overwrite**>, recording will continue despite the HDD full while overwriting the oldest.
If selected <**Stop**>, the recording will stop when the HDD is full.
- Disk End Beep : If selected <**Stop**>, the button is activated. If you check it, the beep will sound on the disk full and the recording stops.



· Disk End Mode Overwrite
☐ Disk End Beep
· ☐ Auto Delete 99 day

- Auto Delete : If you check it, Record Period setup is activated.
  If you setup the auto delete, recorded data only in the configured period are searchable.

5. When the recording option setup is done, press <**OK**>.

SETTING THE EVENT

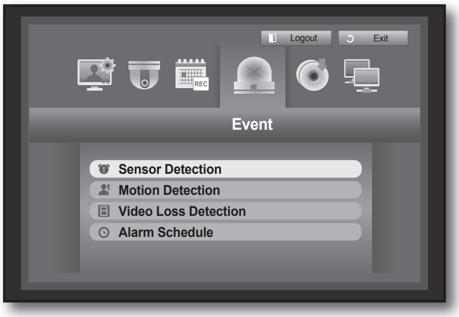
You can set recording options for sensor, motion, and video loss event.

Sensor Detection

You can set the sensor's operating condition and connected camera, as well as alarm output and its duration.

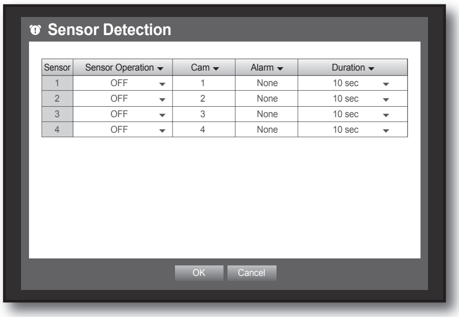
Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Event**>.
   Event setting menu is selected.


Logout
Exit
REC
Event
Sensor Detection
Motion Detection
Video Loss Detection
Alarm Schedule

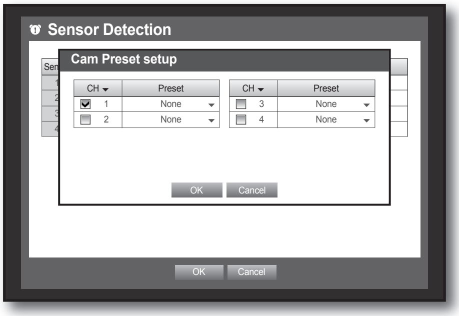
3. Use the up/down buttons (▲▼) to move to <**Sensor Detection**>, and press [**ENTER**] button.
   A window of sensor detection setup appears.
4. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Sensor Operation : Sets the operation mode of sensors.
  - <**OFF**> : Sensor does not operate.
  - <**N.O (Normal Open)**> : Sensor is opened.
    If the sensor is closed, it generates alarm.
  - <**N.C (Normal Close)**> : Sensor is closed.
    If the sensor is open by interruption, it generates alarm.


Sensor Detection
OK
Cancel

Sensor	Sensor Operation	Cam	Alarm	Duration
1	OFF	1	None	10 sec
2	OFF	2	None	10 sec
3	OFF	3	None	10 sec
4	OFF	4	None	10 sec

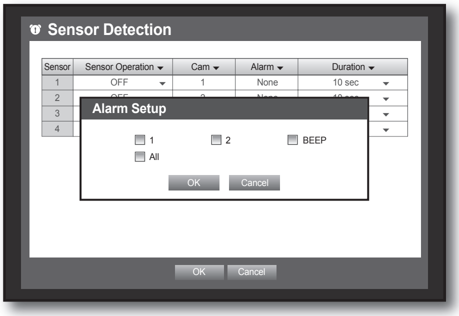
- Cam : Select a channel to be connected to the sensor.
  If selected camera, "**Cam Preset setup**" window appears.
  Select a channel and setup the preset.
  - ■ Preset setup can be done in PTZ mode.


Sensor Detection
Cam Preset setup
OK
Cancel
OK
Cancel

CH	Preset	CH	Preset
☑ 1	None	☐ 3	None
☐ 2	None	☐ 4	None

- Alarm : Sets the alarm output method.
  - ■ For further information on alarm output, refer to “**HDD Alarm** > **Alarm**”. (Page 45)
- Duration : Sets the duration of alarm signal and alarm sound.

5. When the sensor detection setup is done, press <**OK**>.



Sensor	Sensor Operation	Cam	Alarm	Duration
1	OFF	1	None	10 sec
2				
3				
4				

Motion Detection

You can set target detection region and motion, as well as the alarm signal output.
When the motion detection region is set, it detects motion within the area.

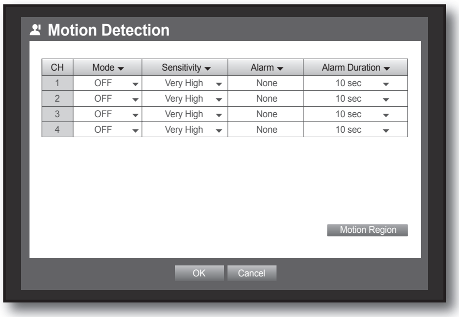
Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Event**> window to move to <**Motion Detection**>, and press [**ENTER**] button. A window of motion detection area setup appears.

4. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Mode : Sets whether to activate motion detection.
- Sensitivity : Sets the sensitivity level of the motion detection.
- Alarm : Sets the alarm output method.
  - ■ For further information on alarm output, refer to “**HDD Alarm** > **Alarm**”. (Page 45)
- Alarm Duration : Sets the duration of alarm signal and alarm sound.

5. When the motion detection setup is done, press <**OK**>.



CH	Mode	Sensitivity	Alarm	Alarm Duration
1	OFF	Very High	None	10 sec
2	OFF	Very High	None	10 sec
3	OFF	Very High	None	10 sec
4	OFF	Very High	None	10 sec

Setting the Motion Detection Area

① Select <**Motion Region**>.

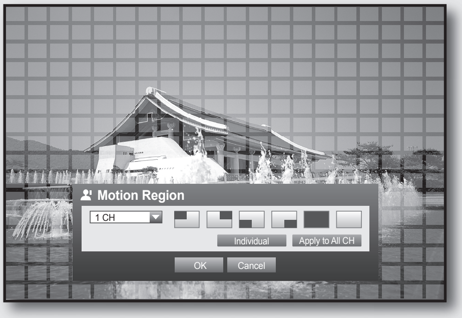
② When “**Motion Region**” window appears, select a channel for detection and set the area of motion detection.

- To set the area in “**Motion Region**” window

In the “**Motion Region**” window, select desired region from <▛ ▜ ▙ ▟ ■ □>.

- To set the area using <**Individual**> selection

In the “**Motion Region**” window, you can select cells individually by using <**Individual**>.



When selected <**Individual**>, “**Motion Region**” window disappears and you can select cells one by one.

When the motion area setup is done, Right-click to select <**Menu**> in the context menu or the [**MENU**] button on the remote control or front panel to display the “**Motion Region**” window again.

- Select : Selected cell is set to be a part of motion detection area.
- Unselect : Selected cell is removed from the motion detection area.
- Inverse : Unselected cells are set to be the motion detection area.
- Menu : After selecting individual motion areas, move to the “**Motion Region**” window.
  - ■ If selected <**Apply to All CH**>, selected motion area is applied to all channels.

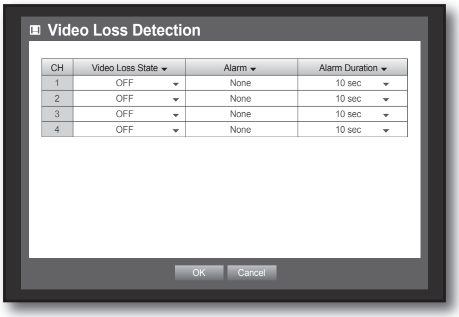
✓ Select
Unselect
Inverse
Menu

③ When the motion detection setup is done, press <**OK**>.

Video Loss Detection

You can set the alarm to be generated on a camera disconnection, which causes a video loss.

Using the mouse may help make setup easier.


Video Loss Detection
OK
Cancel

CH	Video Loss State	Alarm	Alarm Duration
1	OFF	None	10 sec
2	OFF	None	10 sec
3	OFF	None	10 sec
4	OFF	None	10 sec

3. Use the up/down buttons (▲▼) in <**Event**> window to move to <**Video Loss Detection**>, and press [**ENTER**] button.
   A window of video loss detection area setup appears.
4. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

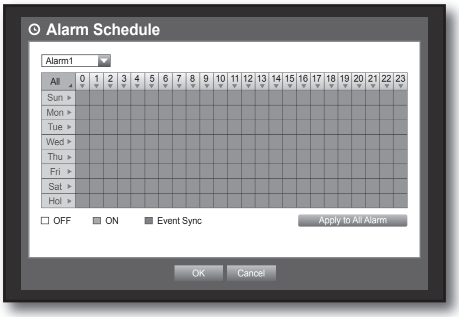
- Video Loss State : Sets whether to activate video loss detection.
- Alarm : Sets the alarm output method.
  - For further information on alarm output, refer to "**HDD Alarm** > **Alarm**". (Page 45)
- Alarm Duration : Sets the duration of alarm signal and alarm sound.

5. When the video loss detection setup is done, press <**OK**>.

Alarm Schedule

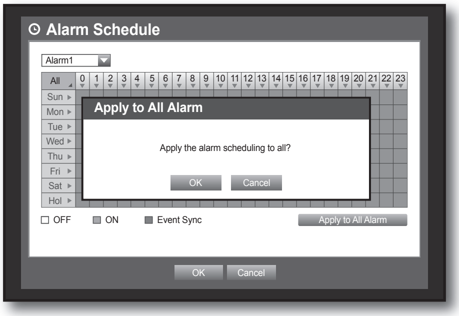
You can set the conditions and operating hours for scheduled alarms.

Using the mouse may help make setup easier.


Alarm Schedule
Alarm1
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Hol
☐ OFF
▨ ON
■ Event Sync
Apply to All Alarm
OK
Cancel

3. Use the up/down buttons (▲▼) in <**Event**> window to move to <**Alarm Schedule**>, and press [**ENTER**] button.
4. A window of <**Alarm Schedule**> settings appears.
5. Alarm : Sets the alarm output method.
   - For further information on alarm output, refer to "**HDD Alarm** > **Alarm**". (Page 45)

- <**ON**> : Marked in orange, and always generates alarm on scheduled time.
- <**OFF**> : Marked in white, no alarm is generated even if an event occurs.
- Event Sync : Marked in Blue, generates alarm only when an event occurs.
- Apply to All Alarm : Applies the configured schedule to all alarms.


Alarm Schedule
Alarm1
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Hol
Apply to All Alarm
OK
Cancel
☐ OFF
▨ ON
■ Event Sync
Apply to All Alarm
OK
Cancel

Apply the alarm scheduling to all?

- When the alarm is generated on the scheduled time, you can stop the alarm by canceling the schedule.

6. When the Alarm Schedule setup is done, press <**OK**>.

using the DVR

BACKUP

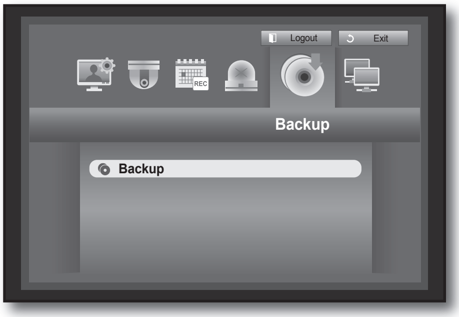
You can check the backup device and set the backup schedule by channel or by time.
The product only supports external HDD of USB memory/DVD and USB type. (Page 96)

Setting the Backup

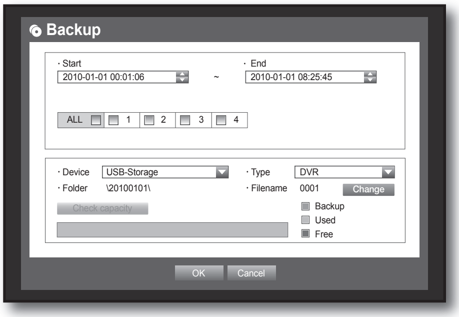
You can backup the desired data to a connected device.

Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Backup**>.
   Backup menu is selected.



3. Press the [**ENTER**] button.
   A backup window appears.
   You can directly access it from the "**Live screen menu**". (Page 24)
4. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.



Start 2010-01-01 00:01:06 ~ End 2010-01-01 08:25:45

Device USB-Storage

Folder \20100101\

Type DVR

Filename 0001

- Backup Range : Sets the <**Start**> and <**End**> time for the backup.
- Channel : Sets the channel to backup.
  You can select multiple channels.
- Device : Select a backup device from the recognized devices.
  If the built-in internal CD/DVD or external USB CD/DVD is used for the backup, you can select the format of recording between AVI and SEC.
  - Since SRD-470 model does not have built-in internal DVD Writer, internal CD/DVD backup is not available.
- Type : Sets the backup data format.
  - AVI : Saves the CODEC information provided by the DVR with the recording data, and saved data can be played back by using external viewers (such as Windows Media Player) on a PC.
  - DVR : Saved data can be played back only by the DVR.
  - SEC : Saves data in the Samsung's proprietary format with built-in viewer, which supports immediate playback on a PC.
- Filename : You can set the back file name.
  - Refer to "**Using Virtual Keyboard**". (Page 34)
- Check capacity : Shows the size of the selected backup data, used and available capacity of the selected backup device.
  - Checking will stop if the backup size is over 200%.
- Overlap : Shows a list of overlapping data on a same time according to the number of data.
  It appears when one channel has multiple data on a certain time point due to changing of time or time zone settings, etc.
  - Refer to time and time zone of "**Setting the Date/Time/Language**". (Page 32)

5. When the backup setup is done, press <**OK**>.
   - If no available device is recognized for backup, <**OK**> button is not activated.

- The application may slow down during the backup.
- You can switch to the menu screen during the backup in operation, but playback of data is not available.
- When a CD/DVD or memory device is used for backup, it is not available to use the full capacity of the media since the system consumes a part of its capacity.
- If a CD or DVD media causes errors, the disc tray opens and closes a several times, and eventually backup process will fail. In this case, replace the CD/DVD media and try again.

- Pressing the <**Exit**> during the backup will return to the previous menu, while the backup progresses.

NETWORK CONFIGURATION

It provides networked monitoring of Live screen from a remote place, and supports mail forwarding function with events. You can configure the network environment which enables such functions.

Connection Mode

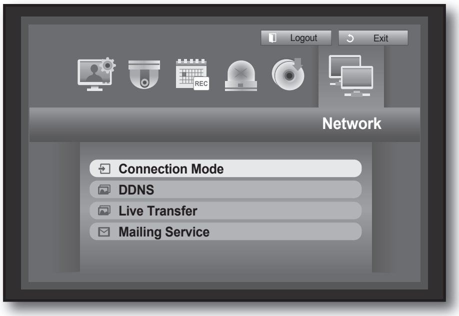
You can set the network connection route and protocol.

Setting the Connection

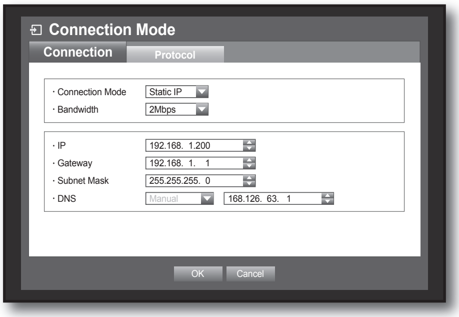
Sets the protocol and environment of the network.

Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Network**>. Network menu is selected.
3. Use the up/down buttons (▲▼) to move to <**Connection Mode**>, and press [**ENTER**] button.



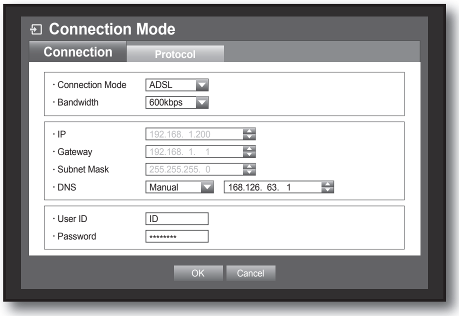
4. Select <**Connection**>. A window of connection mode setup appears.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.



· Connection Mode Static IP
· Bandwidth 2Mbps
· IP 192.168. 1.200
· Gateway 192.168. 1. 1
· Subnet Mask 255.255.255. 0
· DNS Manual 168.126. 63. 1

- Connection Mode : Sets the network connection mode.
- Bandwidth : Sets the maximum data flow to be transferred. (Upload speed)
  Options will vary depending on the selected connection mode.
  - For <**Static IP**>, <**Dynamic IP**> : Select one from 50 kbps ~ 2Mbps, and Unlimited.
  - For <**ADSL**>, select one from 50 kbps ~ 600 kbps.

- IP, Gateway, Subnet Mask, and DNS
  - For <**Static IP**> : You can directly input IP address, Gateway, Subnet Mask and DNS.
  - For <**Dynamic IP**> : IP address, Gateway, and Subnet Mask are set automatically.
  - For <**ADSL**> : IP address, Gateway, and Subnet Mask are set automatically.
- User ID, Password : In case you selected ADSL, provide the "**User ID**" and its "**Password**".



· Connection Mode: ADSL
· Bandwidth: 600kbps
· IP: 192.168. 1.200
· Gateway: 192.168. 1. 1
· Subnet Mask: 255.255.255. 0
· DNS: Manual 168.126. 63. 1
· User ID: ID
· Password: ********

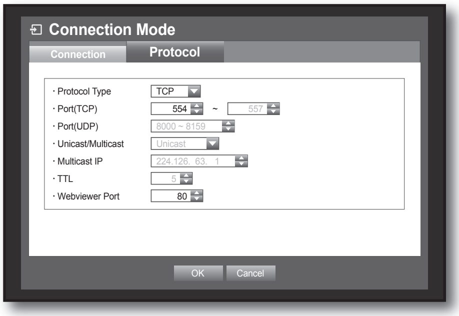
■ DNS server for <**Dynamic IP**> and <**ADSL**> can be set by user only if you selected <**Manual**>.

6. When the connection setup is done, press <**OK**>.

Setting the Protocol

3. Use the up/down buttons (▲▼) in <**Network**> window to move to <**Connection Mode**>, and press [**ENTER**] button.
4. Select <**Protocol**>.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Protocol Type : Select the protocol type between TCP and UDP.
  - ■ If selected UDP, selections of Port (TCP), Port (UDP), and Unicast/Multicast are activated.



· Protocol Type: TCP
· Port(TCP): 554 ~ 557
· Port(UDP): 8000 ~ 8159
· Unicast/Multicast: Unicast
· Multicast IP: 224.126. 63. 1
· TTL: 5
· Webviewer Port: 80

- Port (TCP) : Initially, <**554~557**> is set. It increases / decreases by 4.
  - TCP: It has better stability and lower speed when compared to UDP, and recommended for internet environments.
- Port (UDP) : Initially, <**8000~8159**> is set. It increases / decreases by 160.
  - UDP : It has less stability and faster speed when compared to TCP, and recommended for local area network (LAN) environments.
- Unicast/Multicast : Select one between Unicast and Multicast.
  If selected Multicast, Multicast IP and TTL are activated.
  - Unicast : Transfers data (UDP, TCP) individually to each connecting client.
  - Multicast : Multiple client can receive the data (only in UDP) without putting additional traffic load to the network.
- Multicast IP : User can directly input.
- TTL : Select from 0 ~ 255. Initial value for the TTL is set to <**5**>.
- Webviewer Port : Enter the port number for the Web Viewer. Initially, it is set to <**80**>.

6. When the protocol setup is done, press <**OK**>.

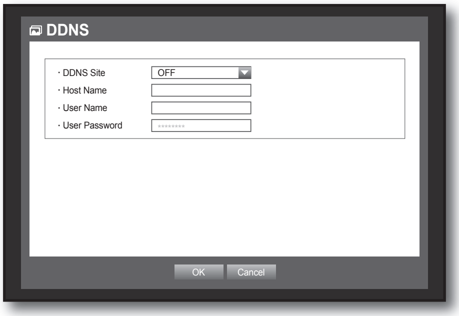
DDNS

You can set the DDNS site for a remote user's network connection.

Using the mouse may help make setup easier.

3. Use the up/down buttons (▲▼) in <**Network**> window to move to <**DDNS**>, and press [**ENTER**] button.
4. Use virtual keyboard to enter user inputs.
   - Refer to "**Using Virtual Keyboard**". (Page 34)
   - If selected <**OFF**> or <**Samsung DDNS**>, input fields are deactivated.
5. When the DDNS setup is done, press <**OK**>.

- Refer to <**DDNS Setting**>. (Page 61)



· DDNS Site: OFF
· Host Name
· User Name
· User Password: ********

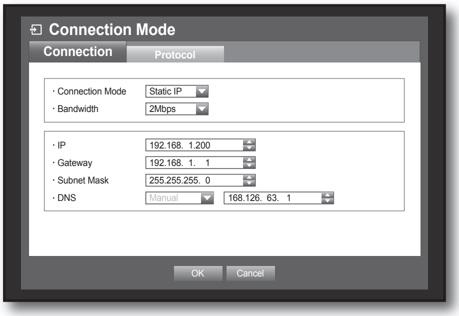
Connecting and Setting the Network

Networking may differ from the connection method, check your environment before setting the connection mode.

When no router is used

- **Static IP mode**

- Internet connection : Static IP ADSL, leased line, and LAN environments allows connection between the DVR and remote user.
- DVR Network Settings : Set the <**Connection Mode**> in <**Connection**> menu of the connected DVR to <**Static IP**>.
  - Consult your network manager for IP, Gateway and Subnet Mask.



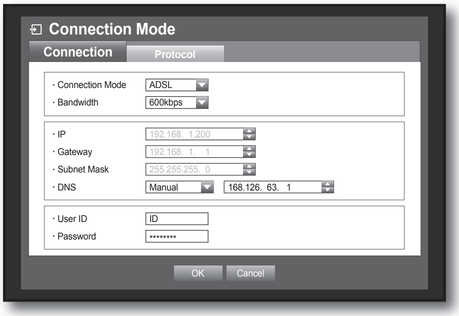
· Connection Mode: Static IP
· Bandwidth: 2Mbps
· IP: 192.168. 1.200
· Gateway: 192.168. 1. 1
· Subnet Mask: 255.255.255. 0
· DNS: Manual 168.126. 63. 1

- **Dynamic IP (DHCP) mode**

- Internet connection : Connect the DVR directly to a cable modem, DHCP ADSL modem or FTTH network.
- DVR Network Settings : Set the <**Connection Mode**> in <**Connection**> menu of the connected DVR to <**Dynamic IP**>.

- **ADSL (PPPoE: ID and password certification)**

- Internet connection : An ADSL modem is directly connected to the DVR, where the ADSL connection requires user ID and password.
- DVR Network Settings : Set the <**Connection Mode**> in <**Connection**> menu of the connected DVR to <**ADSL**>.
  - ADSL <**User ID**> and <**Password**> should be the same to the ADSL user information.
    If you don't know the ID and password, consult your ADSL service provider.



· Connection Mode: ADSL
· Bandwidth: 600kbps
· IP: 192.168. 1.200
· Gateway: 192.168. 1. 1
· Subnet Mask: 255.255.255. 0
· DNS: Manual 168.126. 63. 1
· User ID: ID
· Password: ********

When a router is used

- To avoid IP address conflict with the DVR's static IP, check followings :

- **Setting the DVR with a static IP**

- Internet connection : You can connect the DVR to a router which is connected to an ADSL/Cable modem or a router in a Local Area Network (LAN) environment.

- **Setting the DVR Network**

1. Set the <**Connection Mode**> in <**Connection**> menu of the connected DVR to <**Static IP**>.
2. Check whether the set IP address is in the static IP range provided by the IP router.
   IP, Gateway, and Subnet Mask : Consult your network manager.
   - Check whether the set IP address is in the static IP range provided by the IP router.

- If a DHCP server is configured with starting address (192.168.0.100) and end address (192.168.0.200), you should set the IP address out of the configured DHCP range (192.168.0.2 ~ 192.168.0.99 and 192.168.0.201 ~ 192.168.0.254).

3. Check the Gateway address and subnet mask are equal to those set in the IP router.

- **Setting the DHCP IP Address of the IP router**

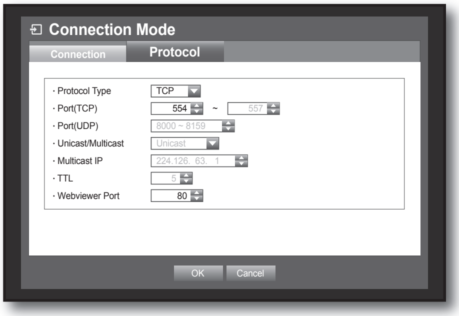
1. To access the IP router’s configurations, open a web browser on the local PC that is connected to the IP router and enter the router’s address (ex : http://192.168.1.1).
2. At this stage, make the local PC's windows network configurations to the below example :
   Ex) IP : 192.168.1.2
   Subnet Mask : 255.255.255.0
   Gateway : 192.168.1.1

- Once connected to the IP router, it prompts with password. While entering nothing to the User Name field, enter “**admin**” into the password field and press <**OK**> to access the router configurations.
- Access the router’s DHCP configuration menu and set its DHCP server activation, and provide the start and end address.
  Set the start address (192.168.0.100) and end address (192.168.0.200).

- Above steps may differ from the router devices depending on the manufacturer.

- **Setting Router’s Port Forwarding**

1. Set the protocol to <**TCP**>.
2. External Port Range : Enter the TCP Port set in the <**Port(TCP)**> in <**Protocol**> menu of the connected DVR. If more than one DVRs are connected to the router, the TCP port can be different.
3. Internal PC IP Address : Enter the IP address set to the <**IP**> in <**Connection**> menu of the connected DVR.
4. Internal Port Range : Set the same to the “**External Port Range**”.



· Protocol Type: TCP
· Port(TCP): 554 ~ 557
· Port(UDP): 8000 ~ 8159
· Unicast/Multicast: Unicast
· Multicast IP: 224.126. 63. 1
· TTL: 5
· Webviewer Port: 80

- Above steps may differ from the router devices depending on the manufacturer.
  Port forwarding is required when you want to access the DVR connected to the router from outside of the router’s network.

DDNS Setting

DDNS is a short form of Dynamic Domain Naming System.
DNS (Domain Name System) is a service that routes a domain name consisting of user friendly characters (ex : www.google.com) to an IP address consisting of numbers (64.233.189.104).
DDNS (Dynamic DNS) is a service that registers a domain name and the floating IP address with the DDNS server so that the domain name can be routed to the IP address even if the IP is changed in a dynamic IP system.

- **Setting DDNS in the DVR**
  Set <**Protocol Type**> in the <**Protocol**> menu of the connected DVR to the following :
  Ex) Protocol Type : TCP
  Port (TCP) : 0554,0555,0556,0557
  DDNS Site : Samsung DDNS

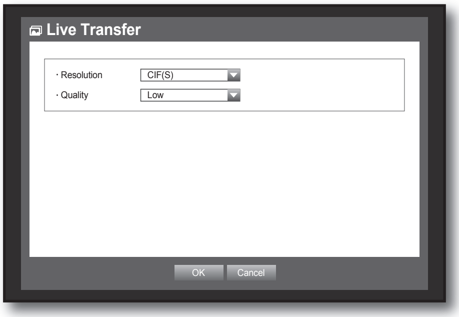
- **DDNS Settings of the Router**
  Select the corresponding menu for the network transfer protocol of the router.

Live Transfer

Sets the quality of the image that is transferred from the DVR to the network.

Using the mouse may help make setup easier.

3. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Live Transfer**> and press the [**ENTER**] button.
   The Live Transfer window appears.
4. Use the direction buttons (▲▼◄ ►) to move to a desired item and set the value.
5. When the live transfer is done, press <**OK**>.
   - For the resolution of the live transfer, refer to "**Resolution**". (Page 52)



· Resolution CIF(S)

· Quality Low

Mailing Service

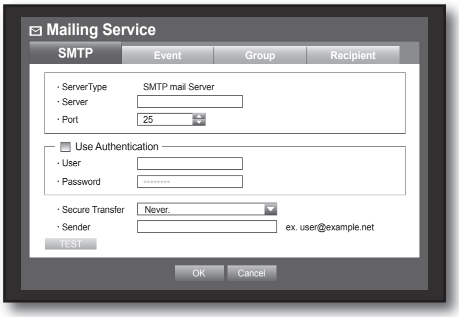
You can send an e-mail to a DVR-registered user at a specific time interval, or if an event occurs.

- If an event occurs with a channel where the camera's video is set to <**OFF**> or the remaining recording count is set to <**OFF**>, only the text notification will be sent to the applicable email address.

SMTP Setting

Sets the SMTP mail server.

Using the mouse may help make setup easier.


Mailing Service
SMTP
Event
Group
Recipient
Use Authentication
· User
· Password
TEST
OK
Cancel

· ServerType SMTP mail Server
· Server
· Port 25
· Secure Transfer Never.
· Sender ex. user@example.net

3. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Mailing Service**> and press the [**ENTER**] button.

4. Select <**SMTP**>.
You will see the SMTP setting window.

5. Use direction buttons (▲▼◄ ►) to move to a desired item and set the value.

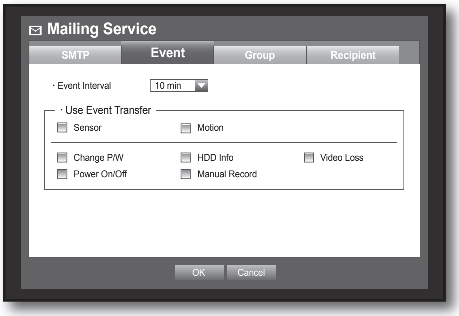
- ServerType : Displays the connected server type.
- Server : Enter a server to connect to.
- Port : Sets the communication port.
- Use Authentication : Check this if the SMTP server uses user authentication.
  The account input box will be activated.
- User : Enter a user to use authentication when connecting to the SMTP server.
- Password : Enter the password of the SMTP server user.
- Secure Transfer : Select one from <**Never**> and <**TLS (if available)**>.
- Sender : Use the virtual keyboard to enter the sender's e-mail address.
  - Refer to "**Using Virtual Keyboard**". (Page 34)
- TEST : Conducts the test on the server settings.

6. When the SMTP setting is done, press <**OK**>.

Event Setting

You can set the interval and type of the event that will be sent to the user.

Using the mouse may help make setup easier.


Mailing Service
SMTP
Event
Group
Recipient
· Use Event Transfer
Sensor
Motion
Change P/W
HDD Info
Video Loss
Power On/Off
Manual Record
OK
Cancel

· Event Interval 10 min

3. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Mailing Service**> and press the [**ENTER**] button.

4. Select <**Event**>.

5. Use direction buttons (▲▼◄ ►) to move to a desired item and set the value.

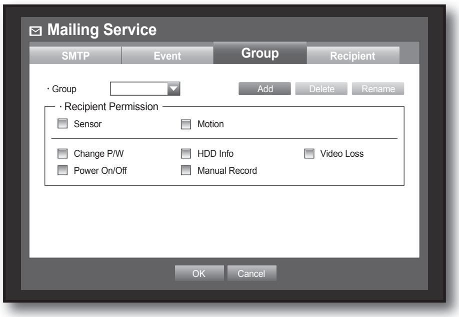
- Event Interval : Set the event interval.
  - If a series of events occurs, the e-mail will be sent at the specified interval, not on each event.
- Use Event Transfer : Select an event type to send if an event occurs.
  If the selected event occurs, the e-mail will be sent to the group that has the recipient authority.

6. When the event setting is done, press <**OK**>.

Group Setting

You can set the group to whom the e-mail is sent, and specify the permission for each group.
You can add recipients for each group in the <**Recipient**> menu item.
The recipient is set separately from the DVR user group.

Using the mouse may help make setup easier.


Mailing Service
SMTP
Event
Group
Recipient
· Group
Add
Delete
Rename
· Recipient Permission
☐ Sensor
☐ Motion
☐ Change P/W
☐ HDD Info
☐ Video Loss
☐ Power On/Off
☐ Manual Record
OK
Cancel

3. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Mailing Service**> and press the [**ENTER**] button.
4. Select <**Group**>.
5. Use direction buttons (▲▼◄ ►) to move to a desired item and set the value.

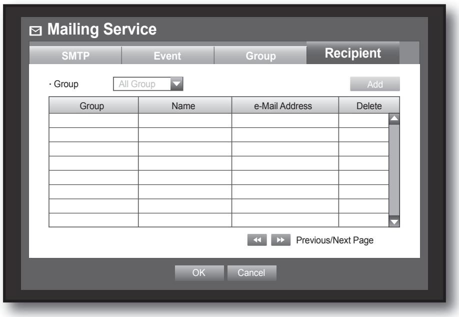
- Add : Select <**Add**> and use the virtual keyboard to add a group.
  - ■ Refer to "**Using Virtual Keyboard**". (Page 34)
- Delete : Deletes the selected group.
- Rename : You can reset the recipient permission of an existing group.
- Recipient Permission : Set the permission of the recipient group.

6. When the group setting is done, press <**OK**>.

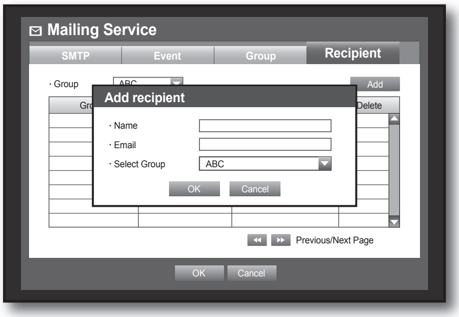
Recipient Setting

You can add a user to the group or delete him/her from the group, or change the group.

Using the mouse may help make setup easier.


Mailing Service
SMTP
Event
Group
Recipient
· Group
All Group
Add
Group
Name
e-Mail Address
Delete
Previous/Next Page
OK
Cancel

3. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Mailing Service**> and press the [**ENTER**] button.
4. Select <**Recipient**>.
5. Use direction buttons (▲▼◄ ►) to move to a desired item and set the value.


Mailing Service
SMTP
Event
Group
Recipient
· Group
ABC
Add
Gro
Delete
Add recipient
· Name
· Email
· Select Group
ABC
OK
Cancel
Previous/Next Page
OK
Cancel

- Add : You can select a recipient name, e-mail address or group.
  You should have created a group in the <**Group**> menu item before you can add a user to the group.
  - ■ Refer to "**Using Virtual Keyboard**" for input of the user name and the e-mail address. (Page 34)

6. When the recipient setting is done, press <**OK**>.

CONTROLLING A PTZ DEVICE

The DVR enables you to adjust the settings of a PTZ camera as well as an ordinary one to your preference.

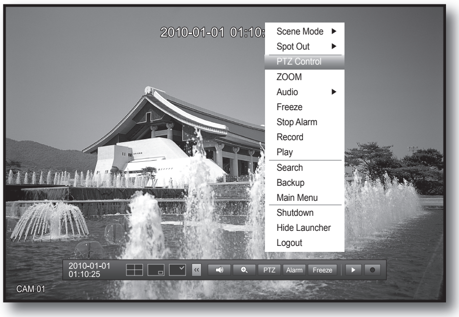
PTZ Device

The PTZ device can be activated only if a channel in connection with the PTZ camera is selected.

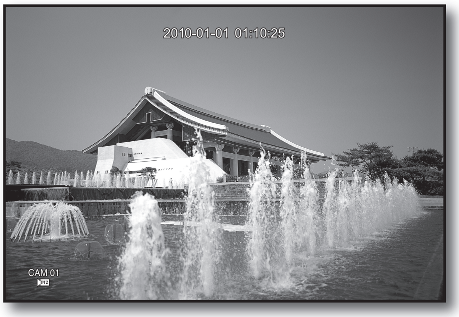
Getting started with PTZ

The PTZ camera is available, only if a channel is selected, in the following way :

- Using the button on the remote control or the front panel
  Select the [**PTZ**] button on the remote control or the front panel.
- Using the launcher menu
  Click PTZ < PTZ > to display the live launcher.
- Using the right-click menu in Live mode
  Right-click any area on the screen to display the context menu, and select <**PTZ Control**>.


2010-01-01 01:10:
Scene Mode ▶
Spot Out ▶
PTZ Control
ZOOM
Audio ▶
Freeze
Stop Alarm
Record
Play
Search
Backup
Main Menu
Shutdown
Hide Launcher
Logout
2010-01-01
01:10:25
PTZ
Alarm
Freeze
CAM 01

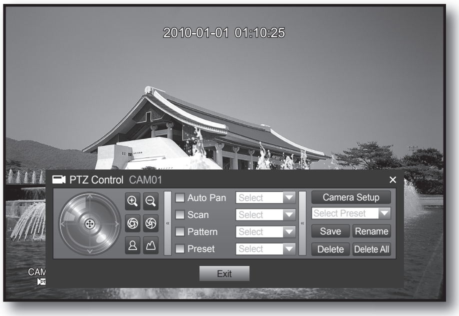
- Using icons on the live screen
  Click the PTZ < PTZ > icon on the live screen.


2010-01-01 01:10:25
CAM 01
PTZ

- The PTZ function is available only if the PTZ camera is connected so that the PTZ icon is displayed on the screen.

Using the PTZ camera

You can use one camera to perform all functions of PAN, TILT and ZOOM for monitoring multiple places and set the preset to your preference in a desired mode.


2010-01-01 01:10:25
PTZ Control CAM01
Auto Pan
Scan
Pattern
Preset
Select
Select
Select
Select
Camera Setup
Select Preset
Save
Rename
Delete
Delete All
Exit
CAM

1. Launch the <**PTZ Control**> menu.
   As the PTZ < PTZ > icon on the bottom right corner turns yellow, you access the "**PTZ Control**" mode to display the "**PTZ Control**" menu.
2. Use direction keys in the launcher menu or use direction buttons (▲▼◄ ►) on the remote control or the front panel to move the target area to record.

- PTZ Wheel : Clicking a nearer point to the center will move in that direction slowly; clicking a farther point from the center will move fast.
  - Keep clicking left to rotate the lens counter clockwise; keep clicking right to rotate the lens clockwise.
- Zoom : You can use the Zoom function of the PTZ camera.
- IRIS : Adjusts the intensity of radiation incoming to the iris.

- Focus : Enables you to adjust the focus manually.
- Auto Pan : The camera automatically runs between the two points that you selected.
- Scan : The camera moves to the preset points in the specified sequence.
  If multiple presets are specified, the PTZ camera will automatically move to all of the preset points one at a time.
- Pattern : Makes the PTZ camera remember and follow the past route.
  - ■ The functions of Auto Pan, Scan and Pattern are supported in the protocols of Samsung, Panasonic and Pelco, and are different in terms of the name and setting, depending on the protocols of Samsung, Panasonic and Pelco.
    (Panasonic : Auto Pan, Sequence, Sort / Pelco : Auto Pan, Frame Scan, Pattern)

■ Before entering the PTZ device control mode, set the values of the PTZ device in the <**Setting the PTZ**> menu. (Page 43)

Preset Setting

A preset is a set of specific target points of a PTZ camera, and up to 20 presets per a camera can be stored.

Using the mouse may help make setup easier.

1. In PTZ Control mode, use the direction buttons to adjust the camera in a desired direction.
2. Select the <**Save**> key.
   The virtual keyboard for inputting the preset will appear.
   - ■ Refer to “**Using Virtual Keyboard**”. (Page 34)

- Save : You can save the preset settings.
- Rename : You can change the settings of the existing presets.
- Delete : Deletes the selected preset.
- Delete All : Deletes all existing presets.

■ If you replace the camera of the channel that stores the preset list with a new one, you should reset the preset accordingly.

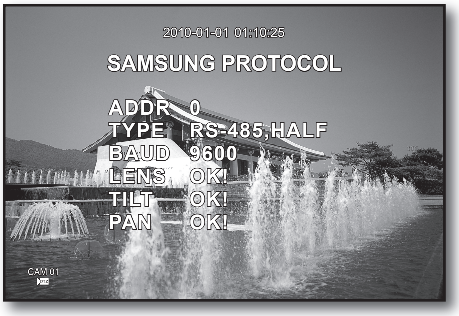
3. Press <**OK**>.
   The preset will be saved as a name that you entered.

Camera Setting

A PTZ camera has its own menu system. Optimize the PTZ camera according to the DVR.

Using the mouse may help make setup easier.

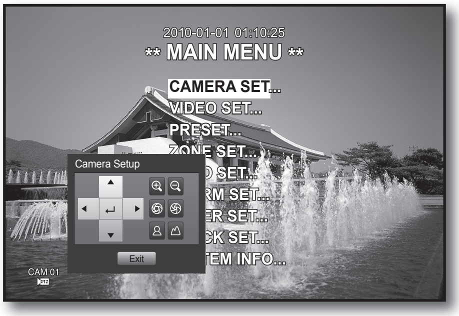
1. Connect the PTZ camera to the DVR and run the PTZ camera again to display the camera’s protocol setting window.
2. Check the protocol ID of the camera.
   - ■ In “**Device** > **Setting the PTZ**”, enter the PTZ camera ID in the ID input box of the channel that is connected to the PTZ camera. (Page 43)


2010-01-01 01:10:25

SAMSUNG PROTOCOL

ADDR 0
TYPE RS-485,HALF
BAUD 9600
LENS OK!
TILT OK!
PAN OK!

3. Select <**Camera Setup**> in the PTZ Control menu.
   The camera-specific menu appears.
   - ■ You can configure the settings of only those cameras that support the protocols of Samsung, Pelco D/P, AD and Panasonic.
   - ■ If you are setting Auto Pan or Pattern in the camera menu, press and hold the appropriate button for a certain time so that the button operation can be different from that in normal PTZ setting.

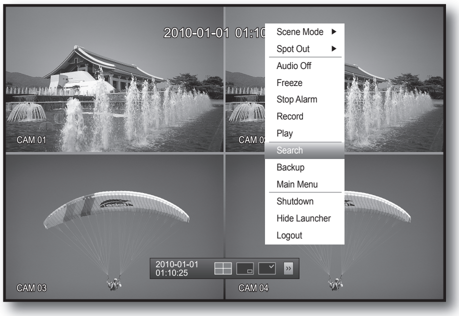


search & play

SEARCH

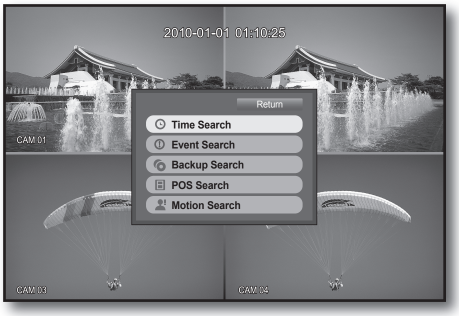
You can perform the search for recorded data by the time or by the search criteria such as an event.
You can access the <**Search**> menu directly in Live mode.

1. In Live mode, right-click any area of the screen.
   The Live menu appears.
2. Select <**Search**>.
   Or, press the [**SEARCH**] button on the remote control or the front panel.


2010-01-01 01:10
CAM 01
CAM 0
CAM 03
CAM 04
Scene Mode ▶
Spot Out ▶
Audio Off
Freeze
Stop Alarm
Record
Play
Search
Backup
Main Menu
Shutdown
Hide Launcher
Logout
2010-01-01
01:10:25

3. The Search menu appears.
   - If you have not checked "**POS USE**" in the "**Main Menu** > **Device** > **POS Device**" menu, the Search menu does not include the "**POS Search**" item. (Page 46)
4. The search can be restricted by the Auto Delete function. Refer to "**Setting the Recording** > **Record Option**". (Page 52)

- Overlapped data : It only appears if there exists overlapped data on a certain time, produced due to the change of DVR's time setup. The latest data comes first, from <**List0**>.
  It does not appear in <**Backup Search**>.

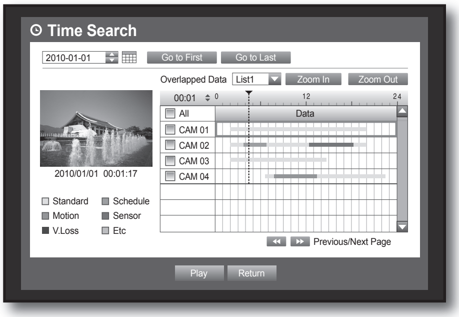

2010-01-01 01:10:25
CAM 01
CAM 03
CAM 04
Return
Time Search
Event Search
Backup Search
POS Search
Motion Search

Time Search

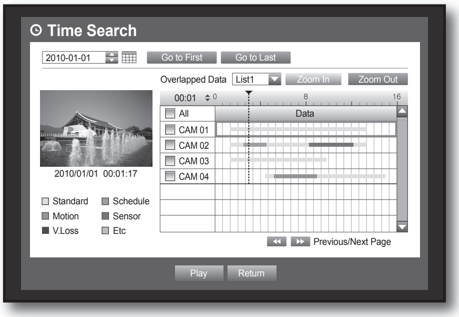
You can search for recorded data of a desired time.
As the time to display may be different depending on the time zone and the DST standard time, the time of data recorded in the same time can be displayed differently depending on time zone and DST settings.

Using the mouse may help make setup easier.

4. Select <**Time Search**> in the <**Search**> menu.
5. Select a date to search.
   - Refer to "**Using the Calendar**". (Page 33)
6. The record data on the specific date will be listed.
   The display bar is different according to the data type.
   So check the data type for the color in the left pane.
7. Use direction buttons (▲▼◄ ►) to set the search criteria and press the [**ENTER**] button.


Time Search
2010-01-01
Go to First
Go to Last
Overlapped Data
List1
Zoom In
Zoom Out
00:01
0
12
24
All
Data
CAM 01
CAM 02
CAM 03
CAM 04
2010/01/01 00:01:17
Standard
Schedule
Motion
Sensor
V.Loss
Etc
Previous/Next Page
Play
Return

- Go to First : Moves to the earliest date.
- Go to Last : Moves to the most recent date.
- Time : Enter a time to perform the search or use the up/down button <↕> to select one.



Time Search

2010-01-01

Overlapped Data List1

00:01

2010/01/01 00:01:17

- Zoom In : The map enlarges in detail.
  It will switch in the sequence of 24 hours - 4 hours - 1 hour - 5 minutes.
- Zoom Out : The map will switch in the reverse order of the detailed mode above.
  It will switch in the sequence of 5 minutes - 1 hour - 4 hours - 24 hours.

■ Double-click a desired time to zoom it in/out.

- Preview : Click <**Channel**> and select (click, drag) a time in <**Duration**> to display a still image for the portion.
  - If the selected channel does not contain any recorded data, it will be marked black.

8. Select a data item and click <**Play**>.
The screen switches to the data playback mode.

Event Search

You can search for events by the channel and play them.

Using the mouse may help make setup easier.

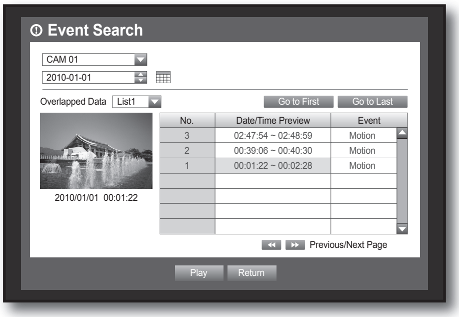
4. Select <**Event Search**> in the <**Search**> menu.

5. Use direction buttons (▲▼◄ ►) to set the search criteria and press the [**ENTER**] button.

■ All record events on a specific date will be found. (Normal/ Schedule recording included)

- Date/Time Preview : If you select a data item in the list, the still image of the selected data will be displayed in the left preview pane.
- Event : Displays the type of the event that occurred.

6. Select a data item and click <**Play**>.
The screen switches to the event data playback mode.



Event Search

CAM 01

2010-01-01

Overlapped Data List1

2010/01/01 00:01:22

No.	Date/Time Preview	Event
3	02:47:54 ~ 02:48:59	Motion
2	00:39:06 ~ 00:40:30	Motion
1	00:01:22 ~ 00:02:28	Motion

Backup Search

Searches for backup data in the connected backup device.
Only data in the format of DVR is included in the search.
Refer to <**Type**> in “**Backup** > **Setting the Backup**”. (Page 56)

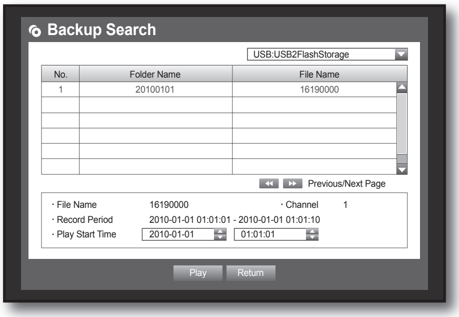
Using the mouse may help make setup easier.

4. Select <**Backup Search**> in the <**Search**> menu.

5. Use direction buttons (▲▼◄ ►) to set the search criteria and press the [**ENTER**] button.

- Record Period : Displays the record period.
- Channel : Displays the recorded channel.
- Play Start Time : Select a time that you start playing.

6. Select a data item and click <**Play**>.
The screen switches to the backup data playback mode.



Backup Search

USB:USB2FlashStorage

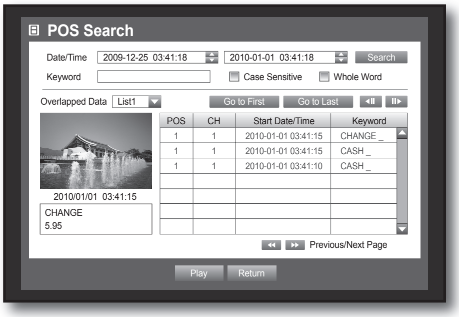
No.	Folder Name	File Name
1	20100101	16190000

· File Name 16190000 · Channel 1
· Record Period 2010-01-01 01:01:01 - 2010-01-01 01:01:10
· Play Start Time 2010-01-01 01:01:01

POS Search

You can search for data in the POS device that is connected to the DVR.

You can use the mouse to select the related items.



Date/Time 2009-12-25 03:41:18 2010-01-01 03:41:18

Keyword

☐ Case Sensitive ☐ Whole Word

Overlapped Data List1

POS	CH	Start Date/Time	Keyword
1	1	2010-01-01 03:41:15	CHANGE _
1	1	2010-01-01 03:41:15	CASH _
1	1	2010-01-01 03:41:10	CASH _

2010/01/01 03:41:15

CHANGE
5.95

4. Select <**POS Search**> in the <**Search**> menu.
5. Use direction buttons (▲▼◄ ►) to set the search criteria and press the [**ENTER**] button.
   - ■ You can enter specific text to refine your search.

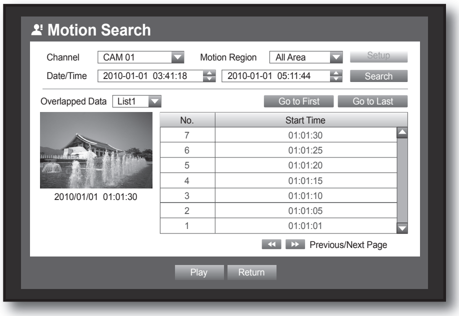
- Keyword : Use the virtual keyboard to enter a keyword.
- Search Criteria :
  - <**Case Sensitive**> : If selected, search will be performed case-sensitively.
  - <**Whole Word**> : If selected, only the exact matches with the keyword will be found.
- Preview : Select a data item in the list to display the preview image.
  Information about the image will be displayed on the bottom of the screen.
- ◀II II▶ : You can use these buttons to accelerate your search if you have a huge list of search results.

6. Select a data item and click <**Play**>.
   The screen switches to the POS data playback mode.

Motion Search

If a motion is detected in each channel, you can set a desired area to perform the search.

You can use the mouse to select the related items.



Channel CAM 01 Motion Region All Area

Date/Time 2010-01-01 03:41:18 2010-01-01 05:11:44

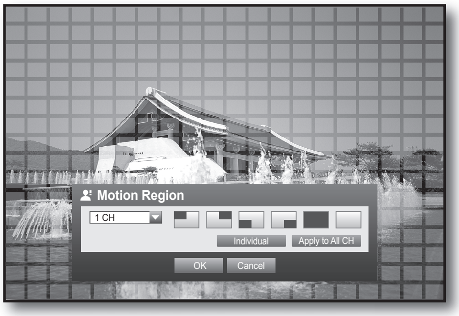
Overlapped Data List1

No.	Start Time
7	01:01:30
6	01:01:25
5	01:01:20
4	01:01:15
3	01:01:10
2	01:01:05
1	01:01:01

2010/01/01 01:01:30

4. Select <**Motion Search**> in the <**Search**> menu.
5. Use direction buttons (▲▼◄ ►) to set the search criteria and press the [**ENTER**] button.
   - ■ If you set the motion area to <**Manual Area**>, the <**Setup**> button will be activated.

- Motion Region : Select an area to perform the search.
  - All Area : Searches for all areas of the selected channel.
  - Current Area : Searches for the motion area for each channel specified in “**Motion Detection** > **Setting the Motion Detection Area**”. (Page 54)
  - Manual Area : You can set the motion area manually.
- Setup : The Setup button will be activated only if you have set the motion area to Manual. Press this button to display the area setting window.
- Date/Time : The Date/Time will be automatically set by the hour, and the end time will be automatically set to one hour later than the start time if it is set.
- Preview : Select a data item in the list to display the still image of the item.



1 CH

6. Select a data item and click <**Play**>.
   The screen switches to the motion data playback mode.

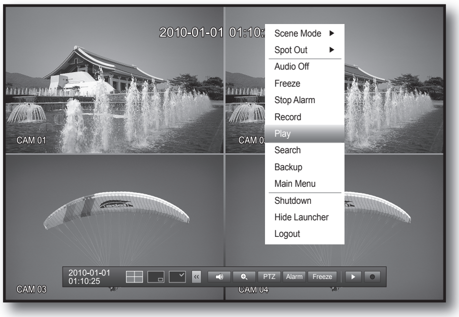
PLAYBACK

Play

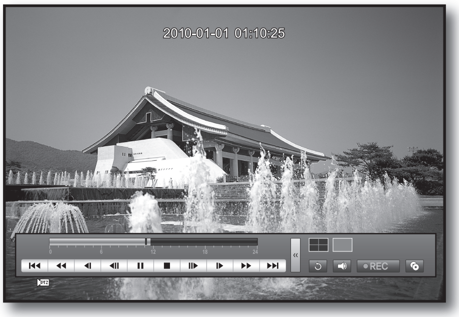
You can play data stored in the HDD and backup a desired portion of the data.

Using the mouse may help make setup easier.

1. In Live mode, click <**Play**> in the right-click menu or < ▶ > in the launcher menu, or press the Play button on the remote control or the front panel.
2. Use the up/down button (▲▼) to select a menu.
   - ■ For data search, refer to <**Search**>. (Page 66)


2010-01-01 01:10:
Scene Mode ▶
Spot Out ▶
Audio Off
Freeze
Stop Alarm
Record
Play
Search
Backup
Main Menu
Shutdown
Hide Launcher
Logout
CAM 01
CAM 0
CAM 03
CAM 04
2010-01-01
01:10:25
PTZ
Alarm
Freeze

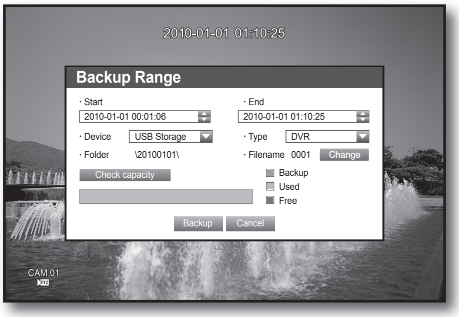
3. Select a data item and click <**Play**> in the Search menu. The selected data is played and the play launcher appears on the screen.
   - ■ If there is an existing data, <**Play**> will start immediately without performing the search.


2010-01-01 01:10:25
REC

- I▶ : You can play up to 4 channels in real time.
  - In a split mode, the real time playback may not be supported, depending on the record quality, resolution and number of channels. And some frame rates may be supported.
- Playback Information : Displays the date and time of the current data in the top corner.
- Mode Switch : Select a desired play mode, or press the [**MODE**] button to switch the screen mode to 4-split and Single in that sequence.
  - ■ The default channel of the Live mode is CH1, which can be changed later.
- ■ : Switches to Live mode.
- ● REC : Records all channels in Live mode.
- Play Time : Displays the time and date of the current video.
- Play Bar : Displays the time of recorded data in the selected channel for the past 24 hours; the red gridline indicates the current play time.

- ■ Speed : Supports various speed options of x1, x2(-2), x4(-4), x8(-8), x16(-16), x32(-32) and x64(-64).
- ■ Slow : Supports slow speed options of x1/2(-1/2), x1/4(-1/4) and x1/8(-1/8).

- Backup : Click < ◎ > to set the current time to the start time of backup; you can specify a backup area using the mouse (yellow triangle).
  Click < ◎ > again to set the current time to the end time of the backup and the "**Backup Range**" window appears.
  - Type : Supports formats of DVR, AVI and SEC. Refer to a list of formats in "**Setting the Backup**". (Page 56)
  - Device : Select a backup device.
  - Check Capacity : Enables you to check the capacity of the selected storage device.



Backup Range

· Start 2010-01-01 00:01:06
· End 2010-01-01 01:10:25
· Device USB Storage
· Type DVR
· Folder \20100101\
· Filename 0001

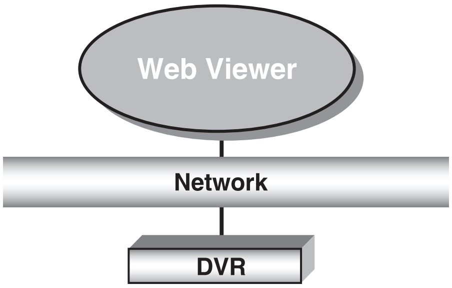
2010-01-01 01:10:25
Change
Check capacity
Backup
Used
Free
Backup
Cancel
CAM 01

4. If you want to return to the Live screen in Play mode, click < ■ > in the launcher menu or press the [■] button on the remote control or the front panel.

INTRODUCING WEB VIEWER

What is Web Viewer?

Web Viewer allows remote access to your DVRs. You have access to live video, archived video, PTZ control (if configured), etc.



PRODUCT FEATURES

- Remote access from a standard browser
- Supports PTZ camera controls
- Supports 1, 4 camera viewing formats (maximum of 4 cameras in the list).
- Gets JPEG, BMP format images to print and save to “Print or Save JPEG, BMP format images”.
- Record video in AVI format-compatible with popular media players. (needed the Xvid codec)

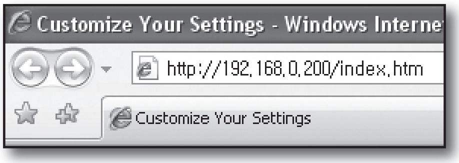
SYSTEM REQUIREMENTS

The following lists the minimum suggested hardware and operating system requirements needed to run the Web Viewer.

OS	Windows XP Professional Windows 2000 Windows Vista Home Basic /Premium Windows 7
Web Browser	Internet Explorer 6.0.2900.2180 or higher
CPU	Intel Pentium 4.2 GHz
Memory	512 MB
Monitor	High Color 16-bit 1024 x 768
HDD	50 MB(Installation space required) * Additional HDD space required for recording. Recorded file size will vary depending on recording quality settings.

CONNECTING WEB VIEWER

1. Open your web browser and type the IP address or URL of DVR into the URL address box.

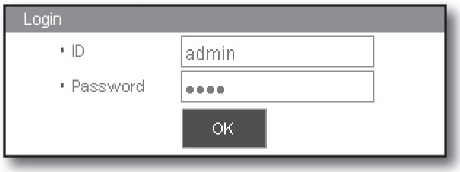

Customize Your Settings - Windows Interne
Customize Your Settings

http://192.168.0.200/index.htm

The basic URL of the DVR is as following in case of MAC address :

- 00-00-F0-ab-cd-ef : nabcdef.websamsung.net
- 00-16-6c-ab-cd-ef : mabcdef.websamsung.net
- 00-68-36-ab-cd-ef : pabcdef.websamsung.net
- You can also use registered URL which setups up in the Setup menu of your DVR.

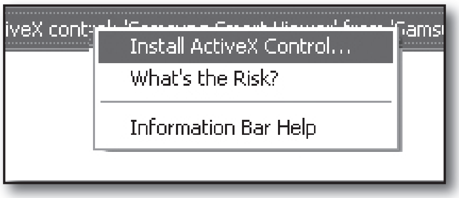
2. Set the Admin ID and password same to those of the DVR Admin.
   For general users, enter the DVR user ID and password.



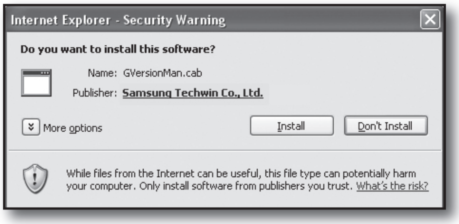
ID: admin
Password: ●●●●

- It allows up to 10 simultaneous access including the Admin and general users.
- It does not allow multiple login of the Admin user.
- Initial password of the Admin user is set to “4321”.
- Password of the Admin and general users can be changed in <**Permission Management**> menu of the DVR.
- Normal users should have set <**Viewer**> under <**Permission Management**> to “Use” before connecting to the Web Viewer. (Page 37)
- All settings are applied by the DVR’s settings.

3. Click <**Install ActiveX Control…**>.


Install ActiveX Control...
What's the Risk?
Information Bar Help

4. Click <**Install**>.


Internet Explorer - Security Warning
More options
Install
Don't Install

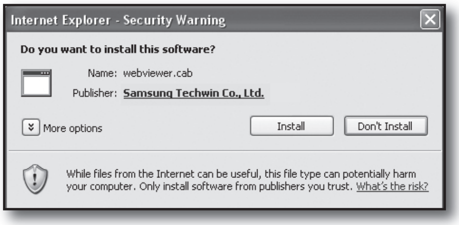
Do you want to install this software?

Name: GVersionMan.cab

Publisher: Samsung Techwin Co., Ltd.

While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?

5. Click <**Install**>.


Internet Explorer - Security Warning
More options
Install
Don't Install

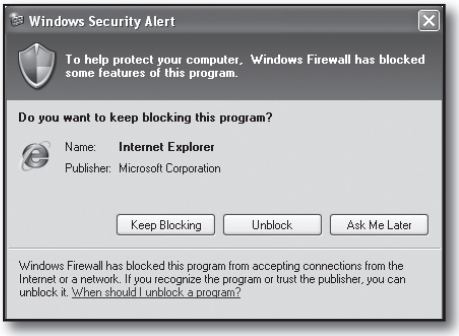
Do you want to install this software?

Name: webviewer.cab

Publisher: Samsung Techwin Co., Ltd.

While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?

6. You may have “**Windows Security Alert**” that attempts to block this with the Windows Firewall. In that case, click <**Unblock**> to start Web Viewer.



Windows Security Alert

To help protect your computer, Windows Firewall has blocked some features of this program.

Do you want to keep blocking this program?

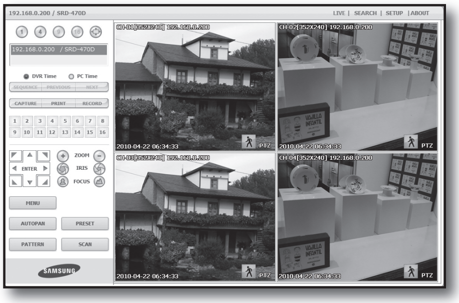
Name: Internet Explorer

Publisher: Microsoft Corporation

Keep Blocking
Unblock
Ask Me Later

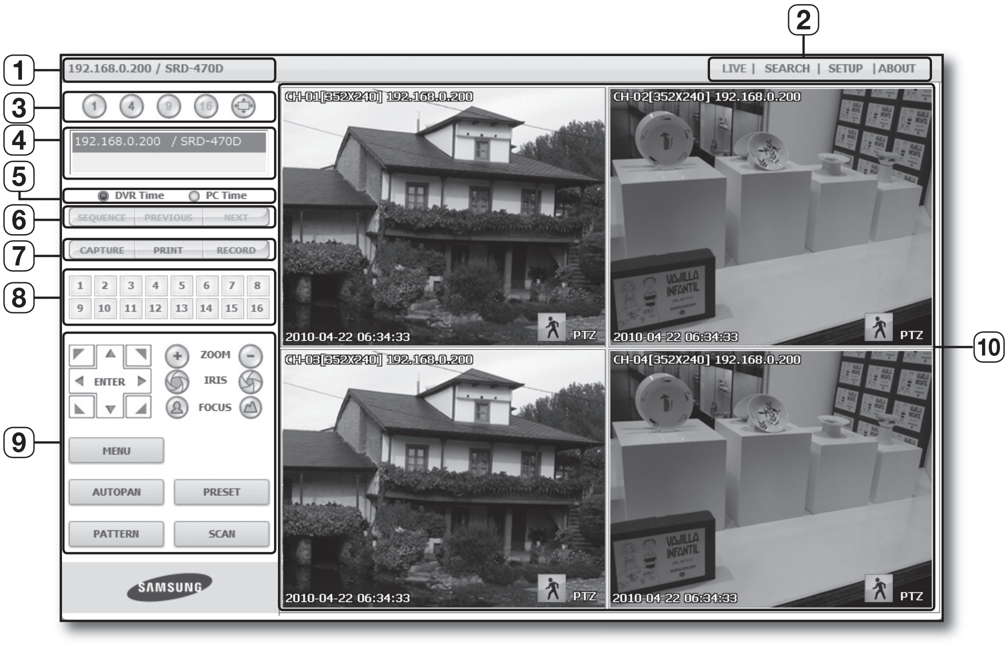
Windows Firewall has blocked this program from accepting connections from the Internet or a network. If you recognize the program or trust the publisher, you can unblock it. When should I unblock a program?

7. Installation is complete.
Now you can see the main screen of Live Viewer.



192.168.0.200 / SRD-470D
LIVE | SEARCH | SETUP | ABOUT
1
4
9
16
192.168.0.200 / SRD-470D
DVR Time
PC Time
SEQUENCE
PREVIOUS
NEXT
CAPTURE
PRINT
RECORD
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
ENTER
ZOOM
IRIS
FOCUS
MENU
AUTOPAN
PRESET
PATTERN
SCAN
SAMSUNG
CH-01[352X240] 192.168.0.200
CH-02[352X240] 192.168.0.200
CH-03[352X240] 192.168.0.200
CH-04[352X240] 192.168.0.200
2010-04-22 06:34:33
PTZ

USING LIVE VIEWER


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
192.168.0.200 / SRD-470D
LIVE | SEARCH | SETUP | ABOUT
1 4 9 16
192.168.0.200 / SRD-470D
DVR Time
PC Time
SEQUENCE PREVIOUS NEXT
CAPTURE PRINT RECORD
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
ENTER
ZOOM
IRIS
FOCUS
MENU
AUTOPAN
PRESET
PATTERN
SCAN
SAMSUNG
CH-01[352X240] 192.168.0.200
CH-02[352X240] 192.168.0.200
CH-03[352X240] 192.168.0.200
CH-04[352X240] 192.168.0.200
2010-04-22 06:34:33
PTZ

The Live Viewer screen consists of following :

① This displays the IP address and the model name of the connected DVR.

② These menus consist of <**LIVE**>, <**SEARCH**>, <**SETUP**>, <**ABOUT**>.

③ These buttons are used for the screen split and full screen mode.

④ Shows the IP address and model name of the connected DVR.

⑤ Select <**DVR Time**> or <**PC Time**> for the OSD time information display setting of the Live Viewer.

⑥ These buttons are used for sequence and changing the screen channel.

⑦ These buttons are used for capture, print, and save the image.

⑧ Shows the channel of the connected DVR.

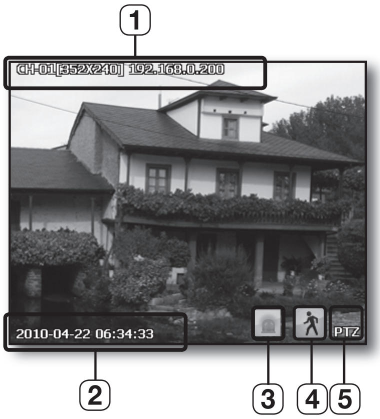
⑨ These buttons are used for PTZ related functions.

⑩ This displays the screen for connected camera with DVR.

- The resolution is set to 1024X768 pixels.
- The initial split-screen mode is set according to the number of channels connected to DVR. You can change the split-screen mode by clicking buttons for split-screen modes.

web viewer

OSD INFORMATION DISPLAY


①
CH-01[352X240] 192.168.0.200
2010-04-22 06:34:33
PTZ
②
③
④
⑤

① The channel number, video size, and IP address of the connected DVR are displayed.

② The current date and time will be displayed according to the selected time information display setting <**DVR Time**> or <**PC Time**>.

③ Alarm icon appears when alarm is issued.
It disappears when pressed the [**ALARM**] button of the DVR.

④ Motion icon appears when motion is detected.
It disappears when pressed the [**ALARM**] button of the DVR.

⑤ It displays whether the PTZ controls are active.

- If you have set PTZ cameras for the DVR, "**PTZ**" is displayed on the screen. Select a PTZ camera channel and use the [**PTZ**] button for camera control.

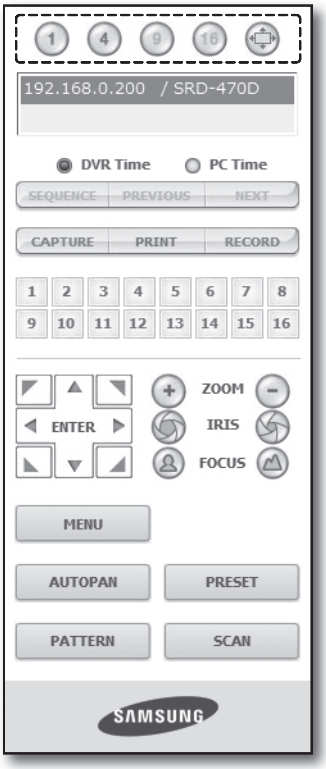
SPLIT-SCREEN

You can change the split mode by clicking each number icon.

SINGLE MODE

QUAD MODE

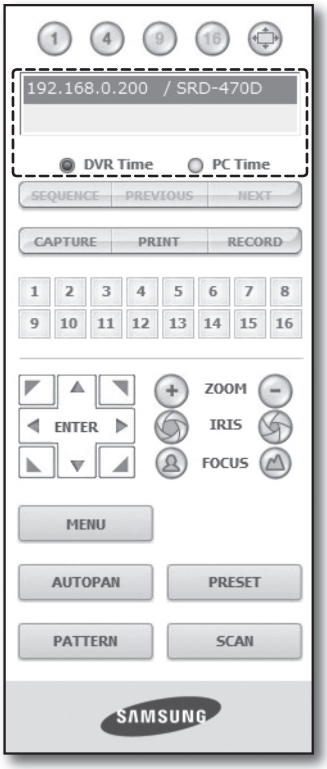
- Click <1> button.
  The screen displays the selected camera connected to the DVR in "**SINGLE MODE**".
- Click <4> button.
  The screen displays the selected camera connected to the DVR in "**QUAD MODE**".
- Click <⛶> button.
  The screen displays the selected camera connected to the DVR in "**FULL SCREEN MODE**".
  Double clicking on the screen or pressing any button of the keyboard returns to the previous mode.


1
4
9
16
192.168.0.200 / SRD-470D
● DVR Time
○ PC Time
SEQUENCE
PREVIOUS
NEXT
CAPTURE
PRINT
RECORD
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
ENTER
ZOOM
IRIS
FOCUS
MENU
AUTOPAN
PRESET
PATTERN
SCAN
SAMSUNG

CONNECTED DVR

This displays the IP address and the status of the connecting DVR.

- Connection failure message
  No Response : Appears when the DVR does not respond.
  Access Denied : Appears when the maximum number of users is exceeded.
- The number of simultaneous connections are limited to 10.


192.168.0.200 / SRD-470D
1
4
9
16
DVR Time
PC Time
SEQUENCE
PREVIOUS
NEXT
CAPTURE
PRINT
RECORD
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
ENTER
ZOOM
IRIS
FOCUS
MENU
AUTOPAN
PRESET
PATTERN
SCAN
SAMSUNG

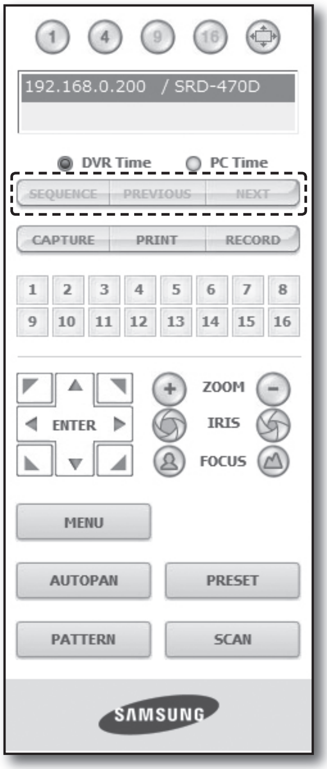
Setting the display of the OSD time information

Select <**DVR Time**> or <**PC Time**> for the OSD time information display setting.

- **DVR Time** : Based on the time of the connected DVR
- **PC Time** : Based on the time of the PC currently running the Web Viewer.

CHANGING THE LIVE SCREEN MODE

- 4-split mode does not support “**SEQUENCE**”, “**PREVIOUS**” and “**NEXT**”.

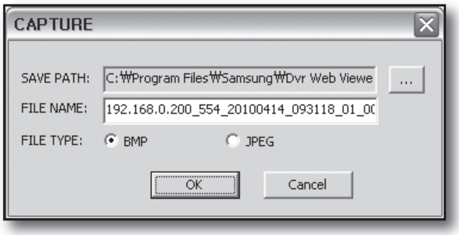

192.168.0.200 / SRD-470D
1
4
9
16
DVR Time
PC Time
SEQUENCE
PREVIOUS
NEXT
CAPTURE
PRINT
RECORD
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
ENTER
ZOOM
IRIS
FOCUS
MENU
AUTOPAN
PRESET
PATTERN
SCAN
SAMSUNG

- **SEQUENCE** : When this button is clicked, screens are switched at a preset interval.
  In SINGLE MODE, the channel numbers are sequentially switched from 1 to 4.
  In QUAD MODE, the screen refreshes at the preset interval.
  - Preset interval (10 seconds)
- **PREVIOUS** : When this button is clicked, the previous screen appears.

  In QUAD MODE, the screen is refreshed.
- **NEXT** : When this button is clicked, the next screen appears.
  In SINGLE MODE, the channel numbers are sequentially switched from 1 to 4.
  In QUAD MODE, the screen is refreshed.

SAVING THE LIVE SCREEN ON THE PC

- **CAPTURE** : Saves the current screen into a BMP or JPEG file.



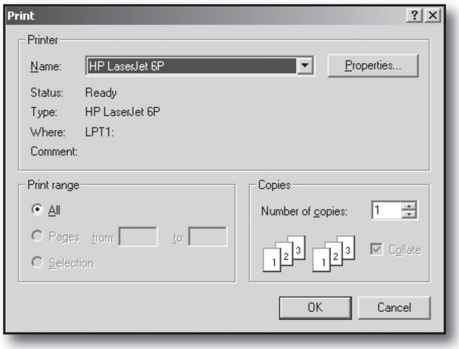
SAVE PATH: C:₩Program Files₩Samsung₩Dvr Web Viewe

FILE NAME: 192.168.0.200_554_20100414_093118_01_0(

FILE TYPE: ● BMP ○ JPEG

  - The default saving path is “C:\Program Files\Samsung\Dvr Web Viewer\SnapShot\Live”. To change the saving path, click <**SAVE PATH** (…)> button and then select the path you want. For Windows Vista or 7, the saving path is “C:\users\(user ID)\AppData\LocalLow\Samsung\DVR Web Viewer\SnapShot\” by default, which cannot be modified.
  - The file is automatically named as following : “IP address_Port number_YYYYMMDD_HHMMSS_camera number_index”
    Ex) 192.168.0.200_554_20100414_093118_01_00

- **PRINT** : Prints out the selected screen out of the currently displayed live screens. It also prints the IP address, time, camera number and the current event status together.



Name: HP LaserJet 6P

Status: Ready

Type: HP LaserJet 6P

Where: LPT1:

Comment:

● All

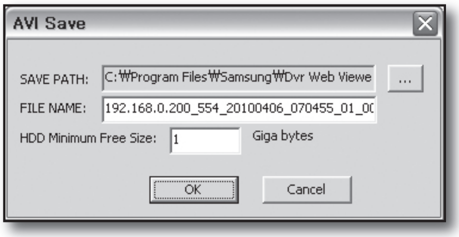
○ Pages from: to:

○ Selection

Number of copies: 1

☑ Collate

- **RECORD** : Saves the current image on the screen and saves it as a avi video file.



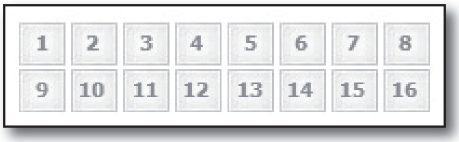
SAVE PATH: C:₩Program Files₩Samsung₩Dvr Web Viewe

FILE NAME: 192.168.0.200_554_20100406_070455_01_0(

HDD Minimum Free Size: 1 Giga bytes

  - To record it, it is required at least 1GB of available space.
  - The default saving path is “C:\Program Files\Samsung\Dvr Web Viewer\VideoClip\Live”. To change the saving path, click <**SAVE PATH** (…)> button and then select the path you want. For Windows Vista or 7, the saving path is “C:\users\(user ID)\AppData\Local-Low\Samsung\DVR Web Viewer\VideoClip\” and it cannot be modified.
  - The file is automatically named as following : “IP address_Port number_YYYYMMDD_HHMMSS_camera number_index”
    Ex) 192.168.0.200_554_20100406_070455_01_00
  - For AVI Save, you need the Xvid codec for playing saved files.
  - HDD Minimum Free Size : During the recording, if there is no more capacity available in the HDD than set free space will prompt with a popup message : “**Cannot record due to insufficient disc space in the HDD**”.

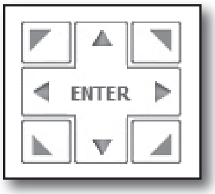
CHANGING THE LIVE SCREEN CHANNEL

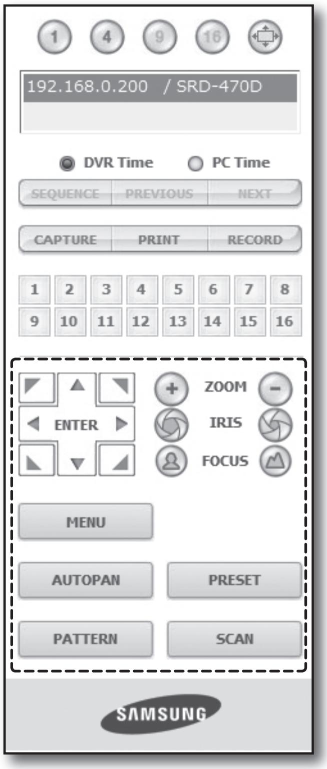

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

- Blue numbers : Indicates that the current channel is connected to a camera.
- Gray numbers : Indicates that the current channel is not connected to any camera.
  - ■ If you select 4-split mode, the channel button for each of cameras 1 ~ 4 will turn blue.

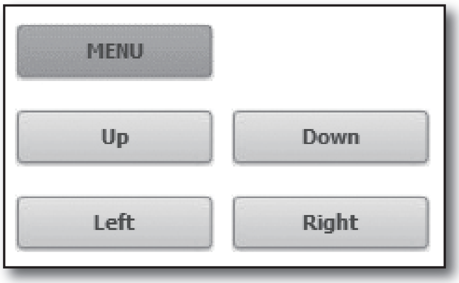
USING PTZ CAMERA

Click the direction buttons to control the camera.




192.168.0.200 / SRD-470D
1
4
9
16
DVR Time
PC Time
SEQUENCE
PREVIOUS
NEXT
CAPTURE
PRINT
RECORD
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
ENTER
ZOOM
IRIS
FOCUS
MENU
AUTOPAN
PRESET
PATTERN
SCAN
SAMSUNG

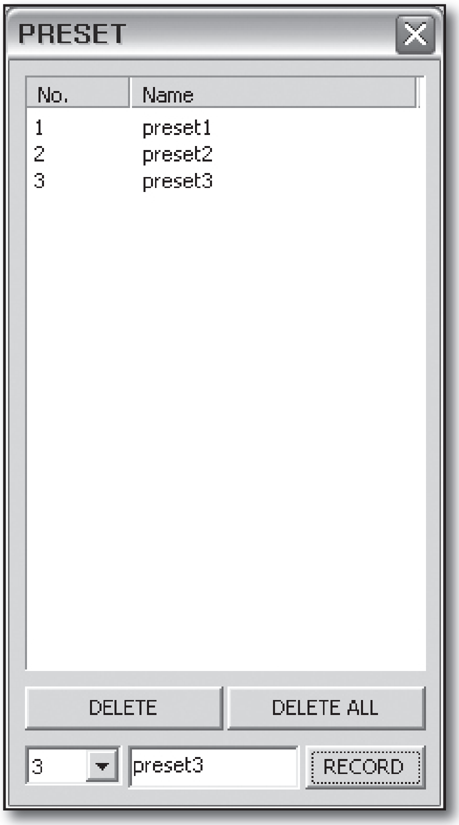
- < + ZOOM - >
  You can zoom in or out an image by using the ZOOM button.
- < IRIS >
  You can adjust the entering light amount by using the IRIS button.
- < FOCUS >
  You can adjust the focus by using the FOCUS button.


MENU
Up
Down
Left
Right

- **MENU** : Appears the camera menu screen.

- **PRESET** : Moves the lens direction to a preset direction.

1. If you click a preset, the camera moves to the selected preset's position.
2. You can delete the selected preset or all presets.
3. You can save a new preset number and name.



No.	Name
1	preset1
2	preset2
3	preset3

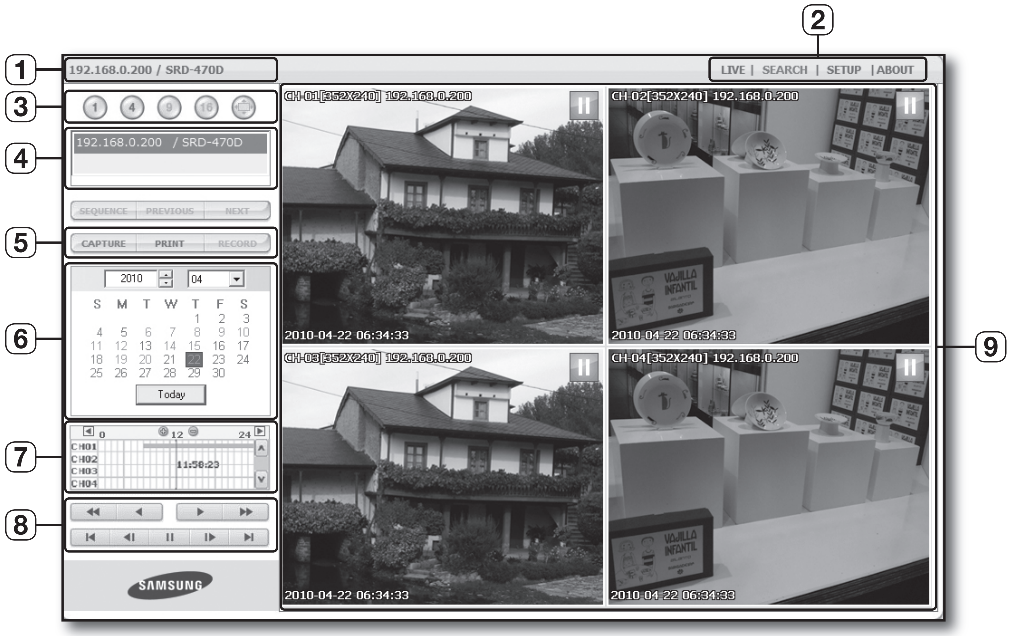
3 preset3

- You can save presets up to 20.

- **AUTOPAN** : Moves the camera lens direction between 2 points set for the camera.
- **SCAN** : Moves the camera lens direction between 2 preset points of the camera.
- **PATTERN** : You can set camera various movement patterns such as zoom, move, etc. so that a camera automatically moves according to the pattern.

- While the DVR controls a PTZ camera, Web Viewer cannot control the camera.
- Camera menu setup is only available for camera supporting the function.
- Each function of PTZ is same to that of the DVR.
- Pan/Tilt of the Smart dome camera is manipulated automatically to center the camera to the mouse clicked point.
- If you drag the mouse using the left button on a certain point, Pan/Tilt of the Smart dome camera is manipulated automatically to center the camera to the middle point between the dragging start and end position. Upward dragging will zoom out, while downward dragging will zoom in.
- Tilt of Power PTZ operates properly within 45°.
- Power and Pan Tilt functions are only available for camera supporting the functions.
  Ex : Samsung SCC-C6475

USING SEARCH VIEWER


1
2
3
4
5
6
7
8
9
192.168.0.200 / SRD-470D
LIVE | SEARCH | SETUP | ABOUT
192.168.0.200 / SRD-470D
SEQUENCE PREVIOUS NEXT
CAPTURE PRINT RECORD
2010 04
Today
CH01
CH02
CH03
CH04
11:58:23
CH-01[352X240] 192.168.0.200
CH-02[352X240] 192.168.0.200
CH-03[352X240] 192.168.0.200
CH-04[352X240] 192.168.0.200
2010-04-22 06:34:33
SAMSUNG

The Search Viewer screen consists of following :

① This displays the IP address and the model name of the connected DVR.

② There are 4 tabs available: <**LIVE**>, <**SEARCH**>, <**SETUP**>, <**ABOUT**>.

③ Switch to a split mode.

④ Shows the IP address and model name of the connected DVR.

⑤ These buttons are used for capture, print, and save the image.

⑥ This displays a calendar at which you can search the recorded video.

⑦ This displays a timeline at which you can search the recorded video by the time.

⑧ These buttons are used for controlling playback.

⑨ This displays the screen for playback of recorded video.

- <**SEQUENCE**>, <**PREVIOUS**>, <**NEXT**> buttons are not available in SEARCH menu.

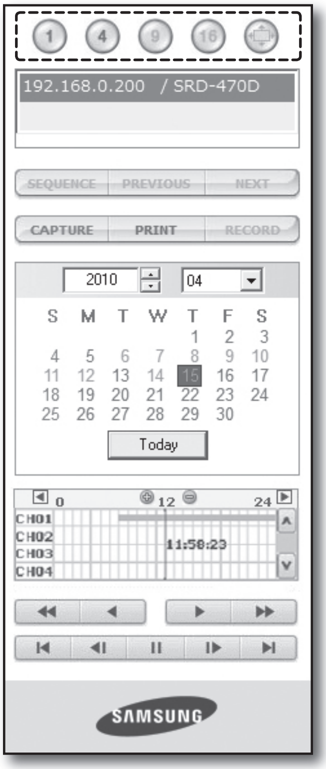
SPLIT-SCREEN

You can change the split mode by clicking each number icon.

CH-01[352X240] 192.168.0.200
2010-04-22 06:34:33
PTZ

SINGLE MODE

QUAD MODE


1
4
9
16
SEQUENCE
PREVIOUS
NEXT
CAPTURE
PRINT
RECORD
Today
CH01
CH02
CH03
CH04
11:58:23
SAMSUNG

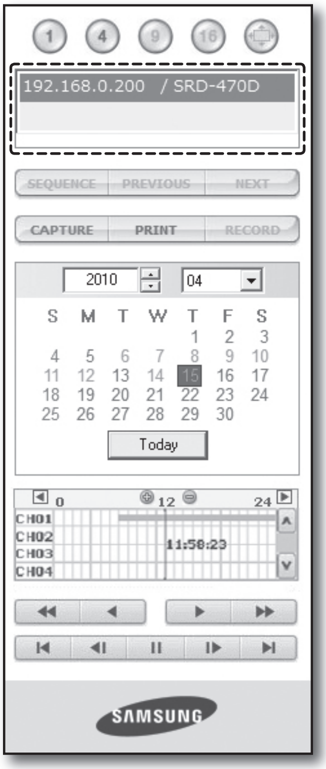
192.168.0.200 / SRD-470D

2010 04

- Click <①> button.
  The screen displays the selected camera connected to the DVR in "**SINGLE MODE**".
- Click <④> button.
  The screen displays the selected camera connected to the DVR in "**QUAD MODE**".

CONNECTED DVR

This displays the IP address and the status of the connecting DVR.


1
4
9
16
SEQUENCE
PREVIOUS
NEXT
CAPTURE
PRINT
RECORD
Today
CH01
CH02
CH03
CH04
11:58:23
SAMSUNG

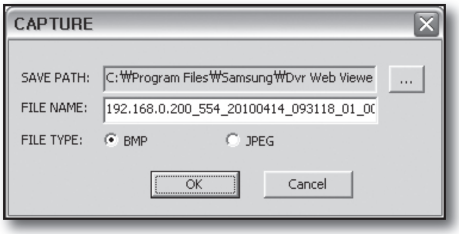
192.168.0.200 / SRD-470D

2010 04

- Connection failure message
  No Response : Appears when the DVR does not respond.
  Access Denied : Appears when the maximum number of users is exceeded.
- The number of simultaneous connection is limited to 3.

SAVING THE LIVE SCREEN ON THE PC

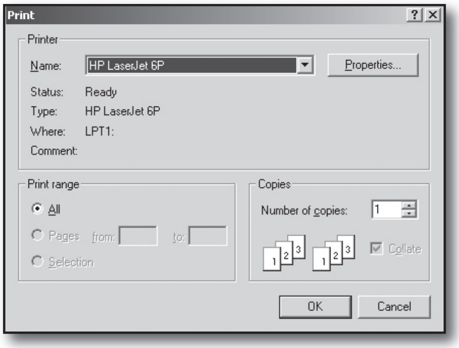
- **CAPTURE** : Saves the current screen into a BMP or JPEG file.



SAVE PATH: C:₩Program Files₩Samsung₩Dvr Web Viewe
FILE NAME: 192.168.0.200_554_20100414_093118_01_0
FILE TYPE: ● BMP ○ JPEG

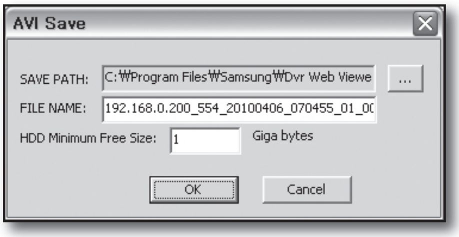
- The default saving path is “C:\Program Files\Samsung\Dvr Web Viewer\SnapShot\Search”. To change the saving path, click <**SAVE PATH** (…)> button and then select the path you want. For Windows Vista or 7, the saving path is “C:\users\(user ID)\AppData\LocalLow\Samsung\DVR Web Viewer\SnapShot\”and it cannot be modified.
- The file is automatically named as following : “IP address_Port number_YYYYMMDD_HHMMSS_camera number_index”
  Ex) 192.168.0.200_554_20100414_093118_01_00

- **PRINT** : Prints the playback screen that is now being displayed. It also prints IP address, time, camera number, and current event state.



Name: HP LaserJet 6P
Status: Ready
Type: HP LaserJet 6P
Where: LPT1:
Comment:
● All
○ Pages from: to:
○ Selection
Number of copies: 1
☑ Collate

- **RECORD** : If you select a channel and click this button during playback (only play), the video data is saved in a DVR file. (It is saved in the designated folder on your PC.)
  To stop recording, click this button again.

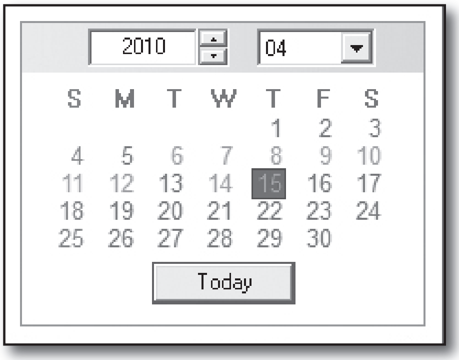


SAVE PATH: C:₩Program Files₩Samsung₩Dvr Web Viewe
FILE NAME: 192.168.0.200_554_20100406_070455_01_0
HDD Minimum Free Size: 1 Giga bytes

- To record it, it is required at least 1GB of available space.
- The default saving path is “C:\Program Files\Samsung\Dvr Web Viewer\VideoClip\Search”. To change the saving path, click <**SAVE PATH** (…)> button and then select the path you want. For Windows Vista or 7, the saving path is “C:\users\(user ID)\AppData\LocalLow\Samsung\DVR Web Viewer\VideoClip\” and it cannot be modified.
- The file is automatically named as following : “IP address_Port number_YYYYMMDD_HHMMSS_camera number_index”
  Ex) 192.168.0.200_554_20100406_070455_01_00
- For AVI save, you need the Xvid codec for playing saved files.

SEARCHING THE RECORDED VIDEO IN THE CALENDAR

If the video data has been recorded on a date, the date is distinguished in green. If you click the date, the recorded video information is displayed in the time line. When you click <**Today**>, it is changed to today's date.


2010
04
S M T W T F S
1 2 3
4 5 6 7 8 9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30
Today

SEARCHING THE RECORDED VIDEO IN THE TIMELINE

It displays the recorded video data status on the DVR after a date is selected. The normal mode displays the time ranging from 0 to 24 Hours while the extension mode displays the time every 2 hours.

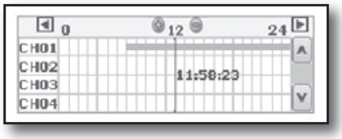
[Normal Mode]

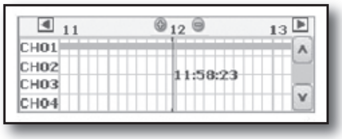
- If you click <⊕> button, it changes to the extension mode.
- Each time line represents 1 hour.

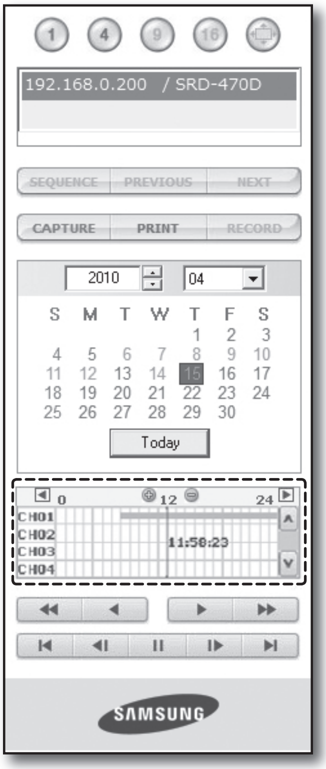
[Extension Mode]

- If you click <⊖> button, it changes to the normal mode.
- Each time line represents 5 minutes.

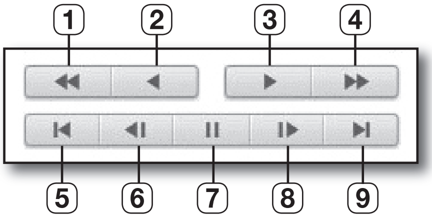
■ The channels are ranging from CH01 to CH04.

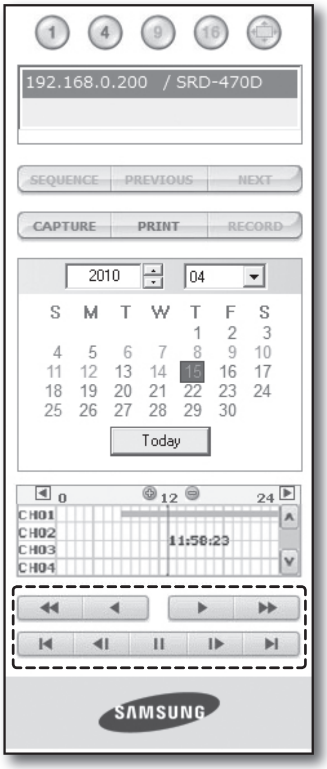

0
12
24
CH01
CH02
CH03
CH04
11:58:23


11
12
13
CH01
CH02
CH03
CH04
11:58:23


1
4
9
16
192.168.0.200 / SRD-470D
SEQUENCE
PREVIOUS
NEXT
CAPTURE
PRINT
RECORD
2010
04
S M T W T F S
Today
0
12
24
CH01
CH02
CH03
CH04
11:58:23
SAMSUNG

CONTROLLING PLAYBACK




1
4
9
16
SEQUENCE
PREVIOUS
NEXT
CAPTURE
PRINT
RECORD
2010
04
S M T W T F S
Today
0
12
24
CH01
CH02
CH03
CH04
11:58:23
SAMSUNG

192.168.0.200 / SRD-470D

① **Fast Backward** : Reverse-plays faster(2x).

② **Reverse Play** : Performs Reverse Play.

③ **Play** : Performs playback.

④ **Fast Forward** : Plays faster(2x).

⑤ **Go to First** : Moves the beginning time of recorded video in the time line.

⑥ **Step Backward** : Performs one step reverseplay by one frame.

⑦ **Stop** : Stops playing.

⑧ **Step Forward** : Performs one step forward by one frame.

⑨ **Go to Last** : Moves the last time of recorded video in the time line.

VIEWER SETUP

You can configure the DVR settings remotely on the network.
To configure the DVR settings, click <**Setup**>.

System

You can configure the various settings of the DVR system.

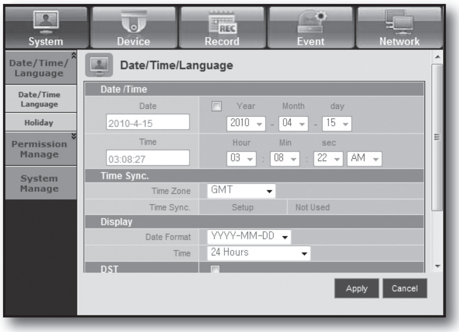
Date/Time/Language

For more information, refer to <**Date/Time/Language**> in the <**System Setup**> menu. (Page 32)

1. Select <**Date/Time/Language**> in the System menu.
2. Configure the DVR settings according to your system environment.

- **Date/Time**

Set the date and time.


System
Device
Record
Event
Network
Date/Time/Language
Date/Time Language
Holiday
Permission Manage
System Manage
Apply
Cancel

Date/Time/Language

Date /Time

Date: 2010-4-15 ☐ Year 2010 - Month 04 - day 15

Time: 03:08:27 Hour 03 : Min 08 : sec 22 AM

Time Sync.

Time Zone: GMT

Time Sync.: Setup Not Used

Display

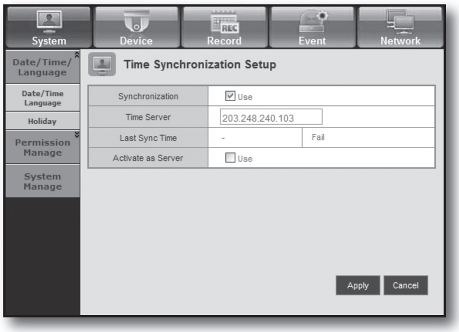
Date Format: YYYY-MM-DD

Time: 24 Hours

DST ☐

- **Time Synchronization Setup**

Set the time synchronization.


System
Device
Record
Event
Network
Date/Time/ Language
Date/Time Language
Holiday
Permission Manage
System Manage
Apply
Cancel

Time Synchronization Setup

Synchronization ☑ Use
Time Server 203.248.240.103
Last Sync Time - Fail
Activate as Server ☐ Use

- **Display**

Date Format : Set the date type.

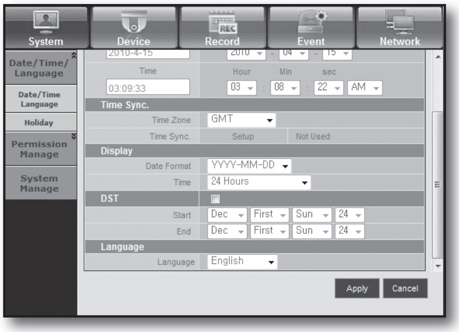
Time : Select a time format to display on the screen.

- **DST (Daylight Saving Time)**

DST is displayed an hour ahead of the standard time of the time zone.

- **Language**

Select a preferred language for the DVR.


System
Device
Record
Event
Network
Date/Time/ Language
Date/Time Language
Holiday
Permission Manage
System Manage
Apply
Cancel

2010-4-15 2010 - 04 - 15
Time 03:09:33 Hour 03 : Min 08 : sec 22 AM

Time Sync.
Time Zone GMT
Time Sync. Setup Not Used

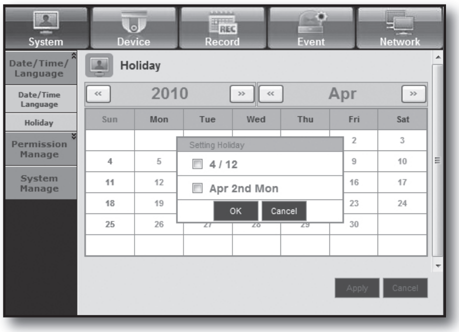
Display
Date Format YYYY-MM-DD
Time 24 Hours

DST ☐
Start Dec First Sun 24
End Dec First Sun 24

Language
Language English

Holiday

You can set specific dates to Holidays according to your preferences.
For more information, refer to <**Setting Holiday**> in the <**System Setup**> menu. (Page 33)


System
Device
Record
Event
Network
Date/Time/ Language
Date/Time Language
Holiday
Permission Manage
System Manage
«
»
OK
Cancel
Apply
Cancel

Holiday

2010 Apr

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					2	3
4	5				9	10
11	12				16	17
18	19				23	24
25	26	27	28	29	30	

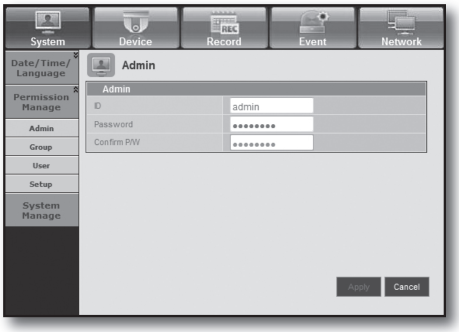
Setting Holiday
☐ 4 / 12
☐ Apr 2nd Mon

Permission Management

For more information, refer to <**Permission Management**> in the <**System Setup**> menu. (Page 34)

- **Admin**

You can change the admin ID or the password.


System
Device
Record
Event
Network
Date/Time/ Language
Permission Manage
Admin
Group
User
Setup
System Manage
Apply
Cancel

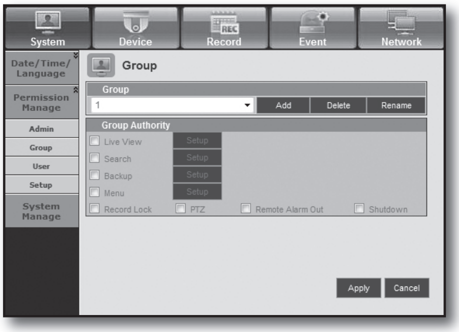
Admin

ID admin
Password ●●●●●●●●
Confirm P/W ●●●●●●●●

- **Group**

Users are classified into groups and the permission can be set according to the group.

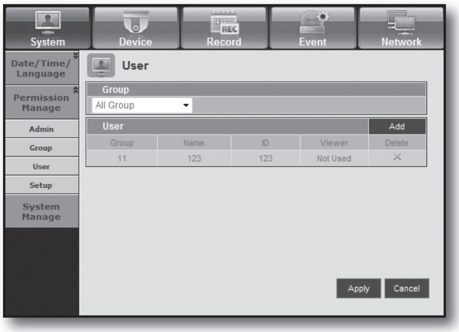
- ■ First of all, add a group.


System
Device
Record
Event
Network
Date/Time/Language
Permission Manage
Admin
Group
User
Setup
System Manage
Group
Add
Delete
Rename
Group Authority
Live View
Search
Backup
Menu
Setup
Record Lock
PTZ
Remote Alarm Out
Shutdown
Apply
Cancel

Group: 1

- **User**

You can add, change or remove a user or users.

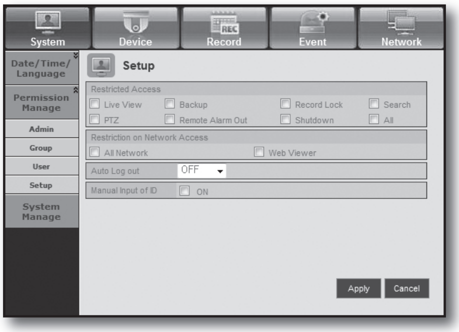

System
Device
Record
Event
Network
Date/Time/Language
Permission Manage
Admin
Group
User
Setup
System Manage
User
Add
Apply
Cancel

Group: All Group

Group	Name	ID	Viewer	Delete
11	123	123	Not Used	✕

- **Setup**

You can set the user permission.


System
Device
Record
Event
Network
Date/Time/Language
Permission Manage
Admin
Group
User
Setup
System Manage
Setup
Restricted Access
Live View
Backup
Record Lock
Search
PTZ
Remote Alarm Out
Shutdown
All
Restriction on Network Access
All Network
Web Viewer
Manual Input of ID
ON
Apply
Cancel

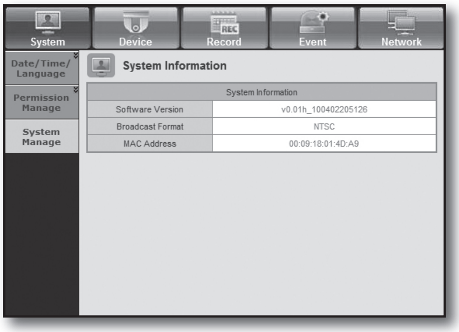
Auto Log out: OFF

System Management

For more information, refer to <**System Management**> in the <**System Setup**> menu. (Page 38)

- **System Information**

You can see information of the current system.
Check the software version, broadcast format and MAC address.


System
Device
Record
Event
Network
Date/Time/Language
Permission Manage
System Manage
System Information

System Information	
Software Version	v0.01h_100402205126
Broadcast Format	NTSC
MAC Address	00:09:18:01:4D:A9

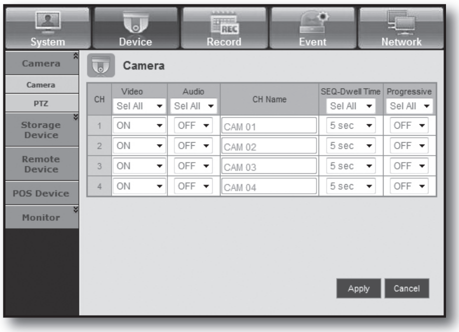
Device

You can check a list of devices that are connected to the DVR and configure the necessary settings.
Click <**Device**> in the menu screen.
For more information, refer to “**Setting the Device**”. (Page 42)

Camera

- **Camera**

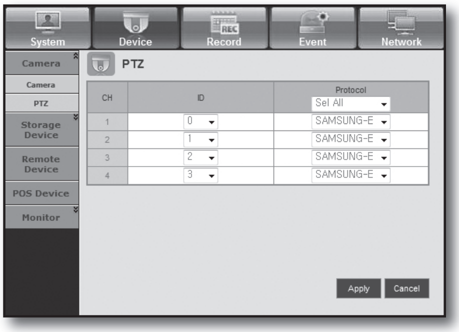
You can configure the settings of the camera that is connected to the DVR.


System
Device
Record
Event
Network
Camera
Camera
PTZ
Storage Device
Remote Device
POS Device
Monitor
Camera
Apply
Cancel

CH	Video	Audio	CH Name	SEQ-Dwell Time	Progressive
	Sel All	Sel All		Sel All	Sel All
1	ON	OFF	CAM 01	5 sec	OFF
2	ON	OFF	CAM 02	5 sec	OFF
3	ON	OFF	CAM 03	5 sec	OFF
4	ON	OFF	CAM 04	5 sec	OFF

- **PTZ**

You can configure the settings of the PTZ camera that is connected to the DVR.
Set the ID and protocol.


System
Device
Record
Event
Network
Camera
Camera
PTZ
Storage Device
Remote Device
POS Device
Monitor
PTZ
Apply
Cancel

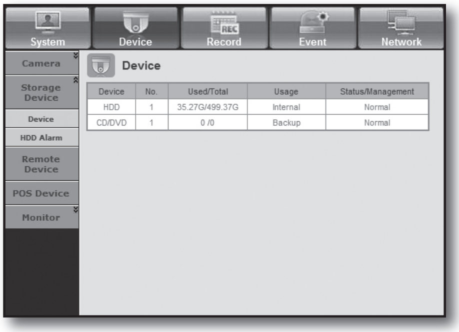
CH	ID	Protocol
		Sel All
1	0	SAMSUNG-E
2	1	SAMSUNG-E
3	2	SAMSUNG-E
4	3	SAMSUNG-E

Storage Device

You can check and change the settings of the storage device.

- **Device**

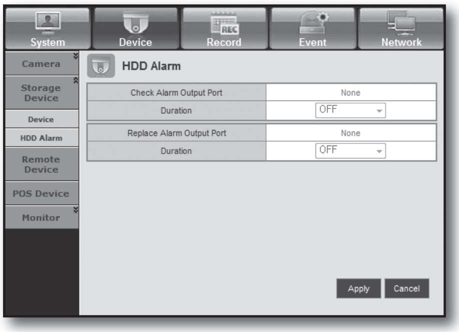
You will see a list of storage devices that are connected to the DVR.
You can check the type, used/total, usage and status of the device.


System
Device
Record
Event
Network
Camera
Storage Device
Device
HDD Alarm
Remote Device
POS Device
Monitor
Device

Device	No.	Used/Total	Usage	Status/Management
HDD	1	35.27G/499.37G	Internal	Normal
CD/DVD	1	0 /0	Backup	Normal

- **HDD Alarm**

You can set the alarm output channel and the alarm duration for an error.

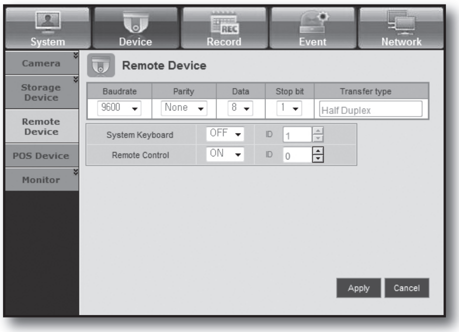

System
Device
Record
Event
Network
Camera
Storage Device
Device
HDD Alarm
Remote Device
POS Device
Monitor
Apply
Cancel

HDD Alarm

Check Alarm Output Port	None
Duration	OFF
Replace Alarm Output Port	None
Duration	OFF

Remote Device

You can see a list of remote devices including PTZ cameras and system keyboards that are connected to the RS-485 port of the DVR and configure the necessary settings.


System
Device
Record
Event
Network
Camera
Storage Device
Remote Device
POS Device
Monitor
Apply
Cancel

Remote Device

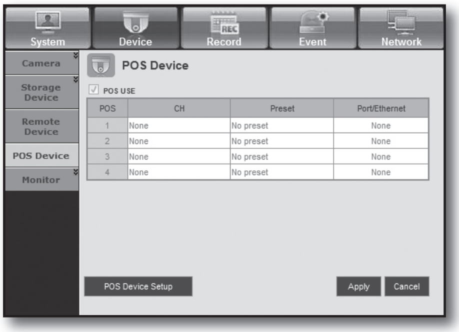
Baudrate	Parity	Data	Stop bit	Transfer type
9600	None	8	1	Half Duplex

System Keyboard	OFF	ID	1
Remote Control	ON	ID	0

POS Device

You can set the channel, preset and communication port of the POS device that is connected to the DVR.

- You cannot set to use the POS device remotely.


System
Device
Record
Event
Network
Camera
Storage Device
Remote Device
POS Device
Monitor
POS Device Setup
Apply
Cancel

POS Device

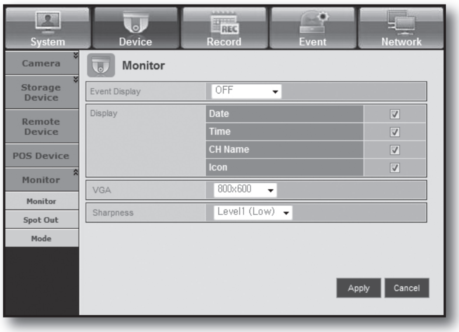
☑ POS USE

POS	CH	Preset	Port/Ethernet
1	None	No preset	None
2	None	No preset	None
3	None	No preset	None
4	None	No preset	None

Monitor

- **Monitor**

You can configure the monitoring screen settings and set the output system.

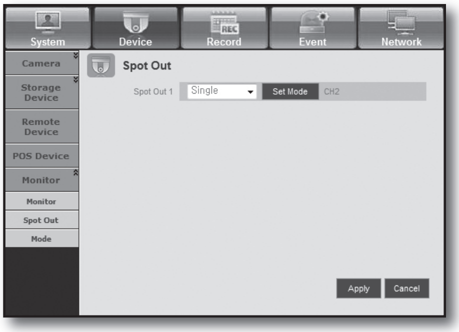

System
Device
Record
Event
Network
Camera
Storage Device
Remote Device
POS Device
Monitor
Monitor
Spot Out
Mode
Apply
Cancel

Monitor

Event Display	OFF	
Display	Date	☑
	Time	☑
	CH Name	☑
	Icon	☑
VGA	800x600	
Sharpness	Level1 (Low)	

- **Spot Out**

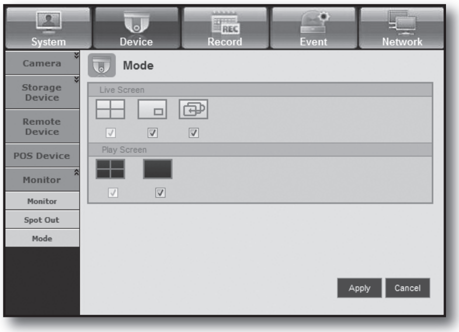
With the monitor connected via the SPOT port, if there occurs an event such as Sensor, Motion, or Alarm, you can select a video output mode for external monitoring.


System
Device
Record
Event
Network
Camera
Storage Device
Remote Device
POS Device
Monitor
Monitor
Spot Out
Mode
Spot Out
Set Mode
Apply
Cancel

Spot Out 1 Single CH2

- **Mode**

You can switch between live mode and play mode.


System
Device
Record
Event
Network
Camera
Storage Device
Remote Device
POS Device
Monitor
Monitor
Spot Out
Mode
Mode
Live Screen
Play Screen
Apply
Cancel

Live Screen ☑ ☑ ☑

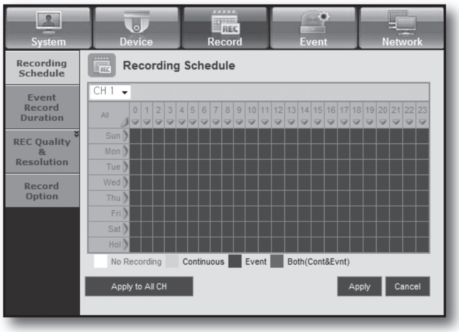
Play Screen ☑ ☑

Record

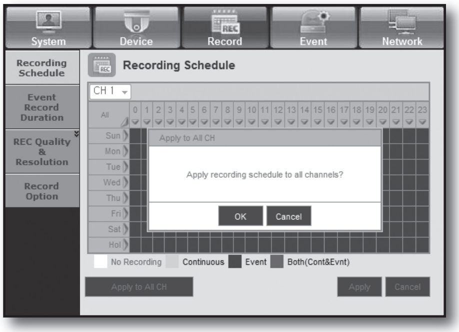
For more information, refer to <**Setting the Recording**>. (Page 50)

Recording Schedule

If you set a recording schedule for a specific date and time, the recording will start at that specific time.


System
Device
Record
Event
Network
Recording Schedule
Event Record Duration
REC Quality & Resolution
Record Option
Recording Schedule
CH 1
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Hol
No Recording
Continuous
Event
Both(Cont&Evnt)
Apply to All CH
Apply
Cancel

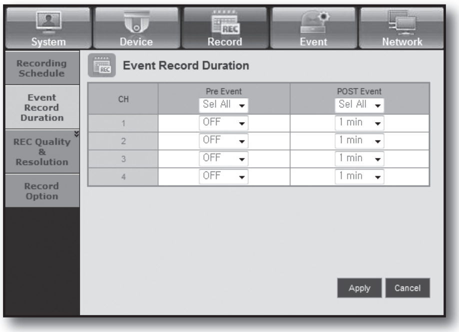
- Apply to All CH : Click <**Apply to All CH**> to display the confirmation window.


System
Device
Record
Event
Network
Recording Schedule
Event Record Duration
REC Quality & Resolution
Record Option
Recording Schedule
CH 1
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Hol
Apply to All CH
OK
Cancel
No Recording
Continuous
Event
Both(Cont&Evnt)
Apply to All CH
Apply
Cancel

Apply recording schedule to all channels?

Event Record Duration

You can set the start and end times of recording that will be activated if an event occurs.


System
Device
Record
Event
Network
Recording Schedule
Event Record Duration
REC Quality & Resolution
Record Option
Apply
Cancel

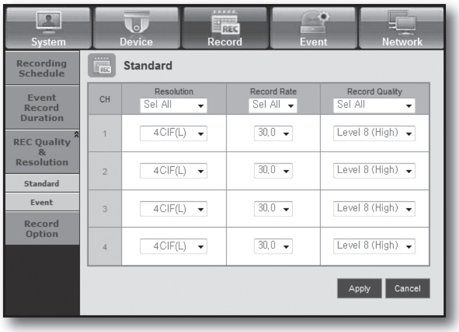
Event Record Duration

CH	Pre Event Sel All	POST Event Sel All
1	OFF	1 min
2	OFF	1 min
3	OFF	1 min
4	OFF	1 min

REC Quality & Resolution

- **Standard/Event**

You can set the resolution, frame rate and recording quality for each channel.

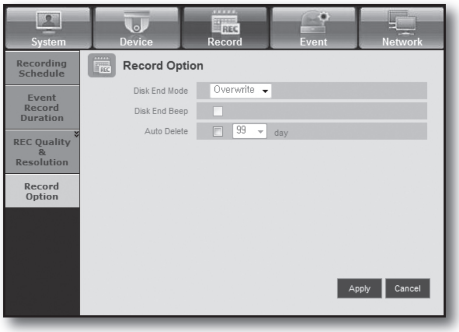

System
Device
Record
Event
Network
Recording Schedule
Event Record Duration
REC Quality & Resolution
Standard
Event
Record Option
Apply
Cancel

Standard

CH	Resolution Sel All	Record Rate Sel All	Record Quality Sel All
1	4CIF(L)	30,0	Level 8 (High)
2	4CIF(L)	30,0	Level 8 (High)
3	4CIF(L)	30,0	Level 8 (High)
4	4CIF(L)	30,0	Level 8 (High)

Record Option

You can set the Disk End Mode.


System
Device
Record
Event
Network
Recording Schedule
Event Record Duration
REC Quality & Resolution
Record Option
Apply
Cancel

Record Option

Disk End Mode: Overwrite

Disk End Beep: ☐

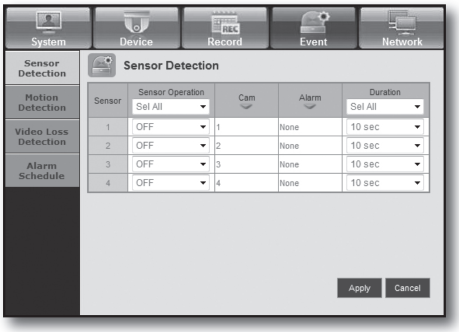
Auto Delete: ☐ 99 day

Event

For more information, refer to <**Setting the Event**>. (Page 53)

Sensor Detection

You can set the sensor operation mode and the synchronized camera as well as the alarm output type and the duration.

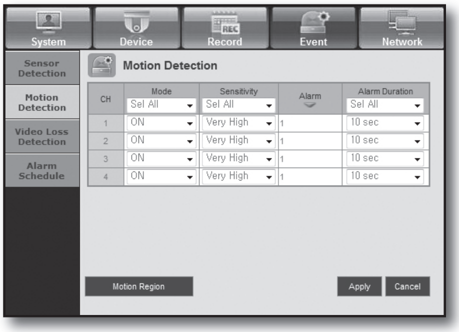

System
Device
Record
Event
Network
Sensor Detection
Motion Detection
Video Loss Detection
Alarm Schedule
Apply
Cancel

Sensor Detection

Sensor	Sensor Operation Sel All	Cam	Alarm	Duration Sel All
1	OFF	1	None	10 sec
2	OFF	2	None	10 sec
3	OFF	3	None	10 sec
4	OFF	4	None	10 sec

Motion Detection

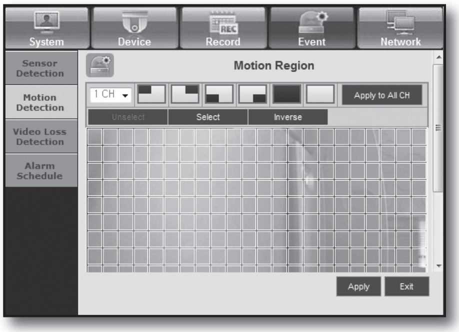
You can set the motion detection mode and the sensitivity as well as the alarm output type and the duration.


System
Device
Record
Event
Network
Sensor Detection
Motion Detection
Video Loss Detection
Alarm Schedule
Motion Detection
Motion Region
Apply
Cancel

CH	Mode	Sensitivity	Alarm	Alarm Duration
	Sel All	Sel All		Sel All
1	ON	Very High	1	10 sec
2	ON	Very High	1	10 sec
3	ON	Very High	1	10 sec
4	ON	Very High	1	10 sec

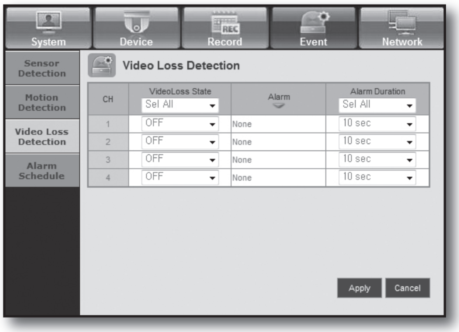
- **Motion Region**

Set the target motion detection area


System
Device
Record
Event
Network
Sensor Detection
Motion Detection
Video Loss Detection
Alarm Schedule
Motion Region
1 CH
Apply to All CH
Unselect
Select
Inverse
Apply
Exit

Video Loss Detection

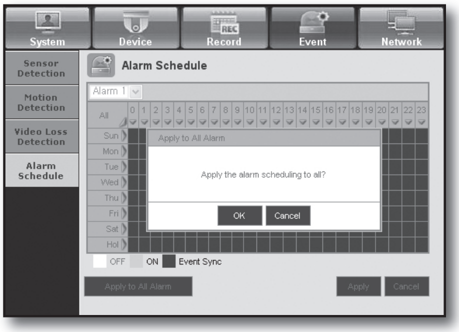
You can set the alarm output time if a video loss occurs.


System
Device
Record
Event
Network
Sensor Detection
Motion Detection
Video Loss Detection
Alarm Schedule
Video Loss Detection
Apply
Cancel

CH	VideoLoss State	Alarm	Alarm Duration
	Sel All		Sel All
1	OFF	None	10 sec
2	OFF	None	10 sec
3	OFF	None	10 sec
4	OFF	None	10 sec

Alarm Schedule

You can schedule the alarm output according to the day of the week and the time.
The default setting is Event Sync, which activates the alarm only if an event occurs.


System
Device
Record
Event
Network
Sensor Detection
Motion Detection
Video Loss Detection
Alarm Schedule
Alarm Schedule
Alarm 1
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Hol
Apply to All Alarm
OK
Cancel
OFF
ON
Event Sync
Apply to All Alarm
Apply
Cancel

Apply the alarm scheduling to all?

Network

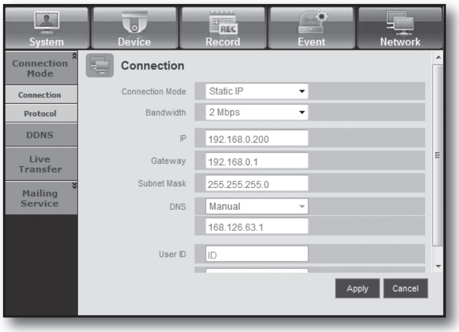
For more information, refer to <**Network Configuration**>. (Page 57)

Connection

A remote user can access the DVR via the network to check the current mode and the IP address.

- **Connection**

You can set the network connection route.

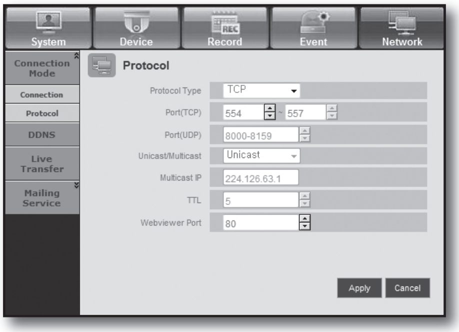

System
Device
Record
Event
Network
Connection Mode
Connection
Protocol
DDNS
Live Transfer
Mailing Service
Apply
Cancel

Connection

Connection Mode: Static IP
Bandwidth: 2 Mbps
IP: 192.168.0.200
Gateway: 192.168.0.1
Subnet Mask: 255.255.255.0
DNS: Manual
168.126.63.1
User ID: ID

- **Protocol**

You can configure the protocol related settings.

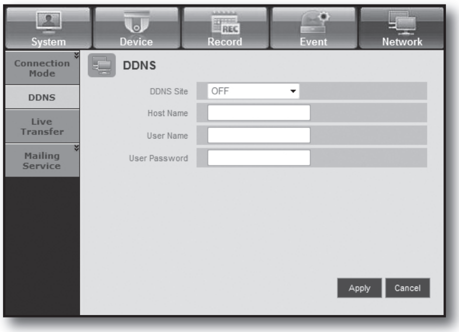

System
Device
Record
Event
Network
Connection Mode
Connection
Protocol
DDNS
Live Transfer
Mailing Service
Apply
Cancel

Protocol

Protocol Type: TCP
Port(TCP): 554 ~ 557
Port(UDP): 8000-8159
Unicast/Multicast: Unicast
Multicast IP: 224.126.63.1
TTL: 5
Webviewer Port: 80

DDNS

You can check the DDNS settings.


System
Device
Record
Event
Network
Connection Mode
DDNS
Live Transfer
Mailing Service
Apply
Cancel

DDNS

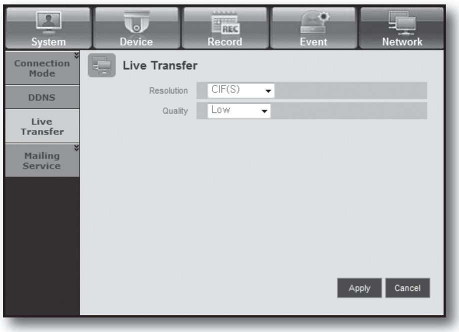
DDNS Site: OFF
Host Name:
User Name:
User Password:

Live Transfer

A remote user can set the images of the DVR.

- **Live Transfer**

A remote user can set the image resolution of the transferred data.


System
Device
Record
Event
Network
Connection Mode
DDNS
Live Transfer
Mailing Service
Apply
Cancel

Live Transfer

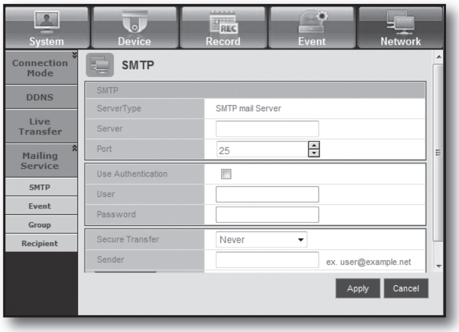
Resolution: CIF(S)
Quality: Low

Mailing Service

You can specify the SMTP server that sends a mail if an event occurs and set the recipient group and users.

- **SMTP**

You can set the server that sends mails and specify if you use the authentication process.


System
Device
Record
Event
Network
Connection Mode
DDNS
Live Transfer
Mailing Service
SMTP
Event
Group
Recipient
SMTP
SMTP
Server
User
Password
Use Authentication ☐
Apply
Cancel

ServerType: SMTP mail Server

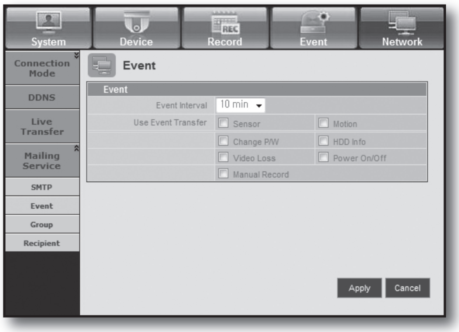
Port: 25

Secure Transfer: Never

Sender: ex. user@example.net

- **Event**

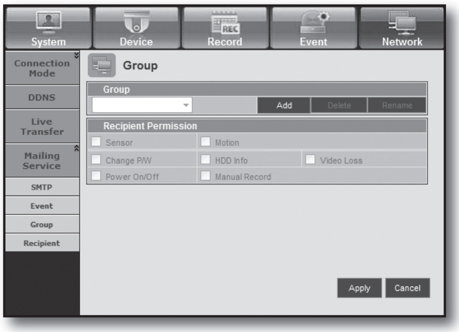
You can set the event interval and specify which events the server sends mails for.


System
Device
Record
Event
Network
Connection Mode
DDNS
Live Transfer
Mailing Service
SMTP
Event
Group
Recipient
Event
Event
Use Event Transfer
☐ Sensor
☐ Motion
☐ Change P/W
☐ HDD Info
☐ Video Loss
☐ Power On/Off
☐ Manual Record
Apply
Cancel

Event Interval: 10 min

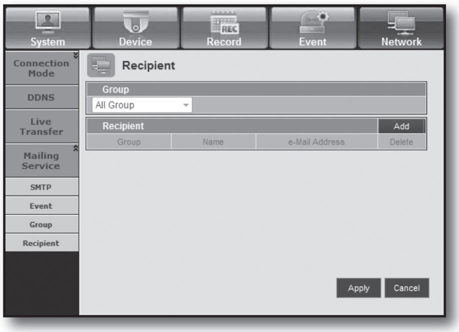
- **Group**

You can add a group to receive the mail if an event occurs and set the permission to receive the event mail for each group.


System
Device
Record
Event
Network
Connection Mode
DDNS
Live Transfer
Mailing Service
SMTP
Event
Group
Recipient
Group
Group
Add
Delete
Rename
Recipient Permission
☐ Sensor
☐ Motion
☐ Change P/W
☐ HDD Info
☐ Video Loss
☐ Power On/Off
☐ Manual Record
Apply
Cancel

- **Recipient**

You can add a user or users who will receive the mail.

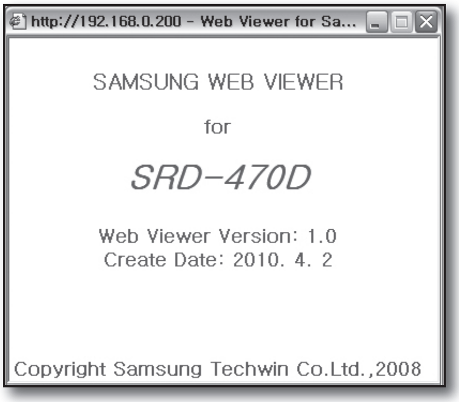

System
Device
Record
Event
Network
Connection Mode
DDNS
Live Transfer
Mailing Service
SMTP
Event
Group
Recipient
Recipient
Group
Recipient
Add
Group
Name
e-Mail Address
Delete
Apply
Cancel

Group: All Group

ABOUT

Click <**ABOUT**>.

Displays the model name of connected DVR and the version of Web Viewer.


http://192.168.0.200 - Web Viewer for Sa...

SAMSUNG WEB VIEWER

for

SRD-470D

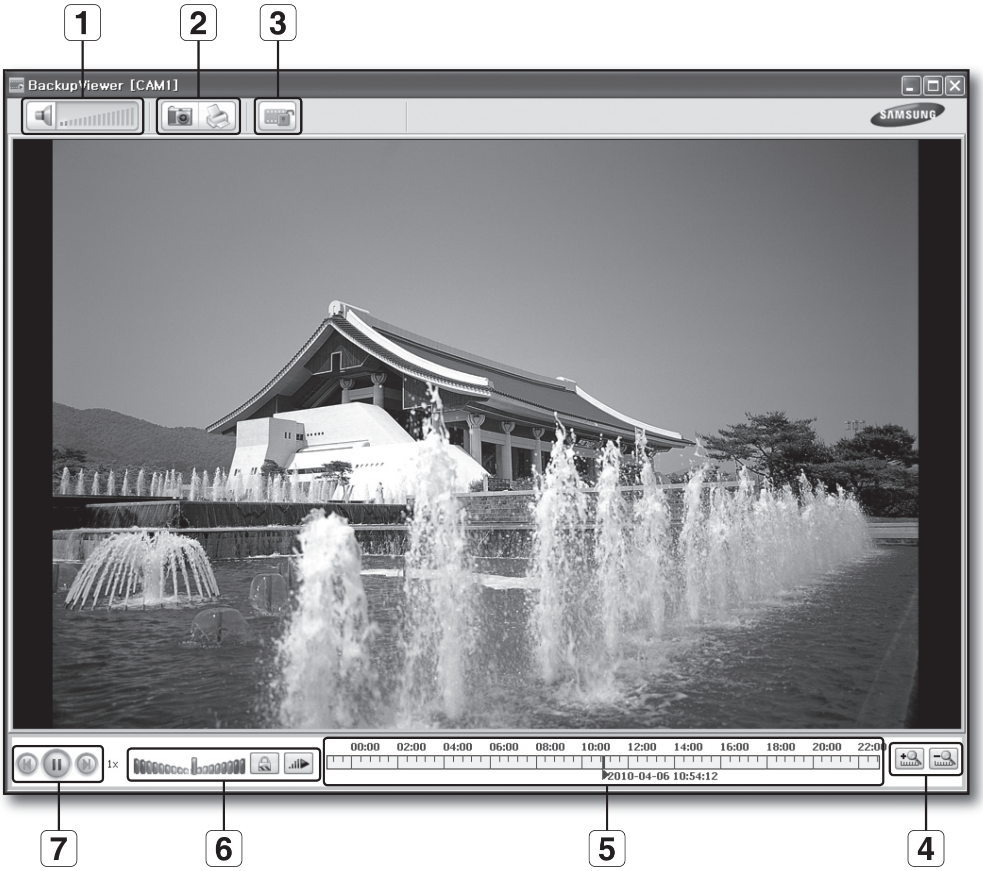
Web Viewer Version: 1.0
Create Date: 2010. 4. 2

Copyright Samsung Techwin Co.Ltd.,2008

backup viewer

SEC BACKUP VIEWER

You can play a file that is backed up in the format of SEC.
Backup in the format of SEC will involve in generating two files: one for the backup data and one for the viewer.
If you run the backup file viewer, the backup data file will be automatically played.


1
2
3
BackupViewer [CAM1]
SAMSUNG
1x
00:00
02:00
04:00
06:00
08:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
2010-04-06 10:54:12
7
6
5
4

Recommended System Requirements

PCs with a lower specification than the recommended below may not fully support forward/backward and high-speed playback.

- OS : Windows XP professional, Windows Vista, Windows 7
- CPU : Intel Core2-Duo 2.4GHz or higher
- RAM : DDR PC-3200 1G or more
- VGA : Geforce 6200 or higher

Name			Description
1	**Audio**	🔈 / 🔇	A toggle button. Each time you press this button, the audio output will toggle between activated and deactivated.
			You can adjust the volume level from 0 to 100.
2	**Screen Printout**	📷	Saves the current screen as an image file. Supported file formats include BMP and JPEG.
		🖨	Prints out the current screen. You should have installed the appropriate printer driver before you can print out the screen.
3	**File Tamper Detection**	🔒 / 🔓	A toggle button. Each time you press this button, it will toggle between activated and deactivated. The closed lock icon indicates activation of the file tamper detection, which will blink the screen three times and stop playing if an unauthorized manipulation of a data file is detected. ■ A message of "The file is forged" will display in the menu bar.
4	**Zoom In/Out**	−🔍	Collapses the time range that is displayed on the range bar of the storage time. You can collapse the range bar until the overall range is shortened to 24 hours.
		+🔍	Enlarges the time range that is displayed on the range bar of the storage time. You can enlarge the range bar until the overall range is extended to 1 minute.
5	**Display of storage time range**		Displays the time range of a stored video file. You can move the gridline of the range bar to select a time point to play.
6	**Speed**	.ıl▶	A toggle button; each time you press this button, the "Slow Playback " icon changes its color to display it's activated/deactivated. If it is activated, you can use the play speed control to adjust the play speed up to x1/32 forward and backward respectively, whereas if deactivated, you can adjust up to x32 forward and backward.
		🔒	A toggle button; each time you press this button, the "Lock Speed" icon changes its color to display it's activated/deactivated. If activated, the adjusted speed will be kept even if you release the mouse on the speed bar. If deactivated, the adjusted speed will be applied only while you use the mouse to hold the adjusted speed, and if you release the mouse, the speed will restore to x1.
			You can adjust the play speed up to x32 forward and backward respectively, which varies according to the frame rate per second of the source. If the frame rate per second is between 20 and 30, the maximum speed is limited to x4, if the FPS is between 11 and 19, it is limited to x16, and if the FPS is 6 or less, it supports up to x32.
7	**Play**	⏮	Displays the next frame. This is available only if the playback is stopped.
		▶	A toggle button. Press it once to start playing the video and switch the button mode to 'Pause', and press it again to switch the button mode to Play and stop playing temporarily.
		⏭	Displays the previous frame. This is available only if the playback is stopped.

appendix

PRODUCT SPECIFICATION

<table>
<tr><th colspan="2">Item</th><th>Details</th><th>Note</th></tr>
<tr><td colspan="2">Operating System</td><td>Embedded OS</td><td></td></tr>
<tr><td colspan="2">Broadcast Format</td><td>NTSC/PAL System</td><td></td></tr>
<tr><td colspan="2">Input Voltage</td><td>AC 100~240V</td><td></td></tr>
<tr><td colspan="2">Power Consumption</td><td>59W</td><td></td></tr>
<tr><td rowspan="2">Video</td><td>Video In</td><td>Composite 4 Channel
- 1.0Vp-p
- 75Ω Hi Z Termination
BNC Type
Loop Through Out 4 Channel
- Auto Termination</td><td></td></tr>
<tr><td>Video Out</td><td>Composite 2 Channel
- Normal Video Output 1 Channel
- Spot Output 1
- BNC Type
VGA 1 Channel</td><td></td></tr>
<tr><td rowspan="2">Audio</td><td>Audio In</td><td>Mono 4 Channel
4 Channel : RCA Type
- 5dBm, 600Ω</td><td></td></tr>
<tr><td>Audio Out</td><td>Mono 1 Channel
- 6dBm
RCA Type</td><td></td></tr>
<tr><td rowspan="2">Live Screen</td><td>Resolution & Frame Rate</td><td><table><tr><th></th><th>NTSC</th><th>PAL</th></tr><tr><td>Resolution</td><td>704x480</td><td>704x576</td></tr><tr><td>Frame Rate</td><td>120ips</td><td>100ips</td></tr></table></td><td></td></tr>
<tr><td>Display Mode</td><td>Single
Split Modes: 4-splits
PIP
Mode sequence
Freeze
2 X Zoom</td><td></td></tr>
</table>

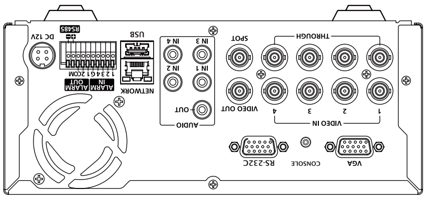
<table>
<tr><th colspan="2">Item</th><th>Details</th><th>Note</th></tr>
<tr><td rowspan="4">Record</td><td>Compression Method</td><td>Video : H.264
Audio : G.723</td><td></td></tr>
<tr><td>Resolution & Quality</td><td><table>
<tr><th>Resolution</th><th>Spec. (Quality)</th><th>Max Recording Rate</th></tr>
<tr><td>CIF(S)
352X240(NTSC)
/352X288(PAL)</td><td>Level8 (high)
~ Level1 (low)</td><td>CIF(S)
120ips(NTSC)/
100ips(PAL)</td></tr>
<tr><td>2CIF(M)
704x240(NTSC)
/704x288(PAL)</td><td>Level8 (high)
~ Level1 (low)</td><td>2CIF(M)
120ips(NTSC)/
100ips(PAL)</td></tr>
<tr><td>4CIF(L)
704x480(NTSC)
/704x576(PAL)</td><td>Level8 (high)
~ Level1 (low)</td><td>4CIF(L)
120ips(NTSC)/
100ips(PAL)</td></tr>
</table></td><td></td></tr>
<tr><td>Record Mode</td><td>Normal Recording → REC button
Scheduled Recording → Schedule Table
Event Recording
- Alarm Detection
- Motion Detection
- Video Loss
- Pre & Post Recording</td><td></td></tr>
<tr><td>Frame Rate</td><td>NTSC : 0.9, 1.9, 3.8, 7.5, 15, 30ips
PAL : 0.8, 1.6, 3.1, 6.2, 12.5, 25ips</td><td></td></tr>
<tr><td>Storage</td><td>Internal</td><td>SRD-470D : SATA HDDx1(MAX)
MAX HDD size : 500GB x 1= 500GB
SRD-470 : SATA HDDx2(MAX)
MAX HDD size : 500GB x 2 = 1TB</td><td>If you want to add an internal HDD, please refer to “**Adding a HDD**”.
(Page 14)</td></tr>
<tr><td rowspan="2">Play</td><td>Search Mode</td><td>Calendar Search
Event Search
- Alarm, Motion, Video Loss
Time/Date Search
Go to First
Go to Last
Backup Search
Text Search(for POS)
Motion Search
Preview</td><td></td></tr>
<tr><td>Resolution & Specification</td><td><table>
<tr><th>Resolution</th><th>Specification</th></tr>
<tr><td>CIF(S)
352X240(NTSC)
/352X288(PAL)</td><td>CIF(S)
120ips(NTSC)/
100ips(PAL)</td></tr>
<tr><td>2CIF(M)
704x240(NTSC)
/704x288(PAL)</td><td>2CIF(M)
120ips(NTSC)/
100ips(PAL)</td></tr>
<tr><td>4CIF(L)
704x480(NTSC)
/704x576(PAL)</td><td>4CIF(L)
120ips(NTSC)/
100ips(PAL)</td></tr>
</table></td><td></td></tr>
</table>

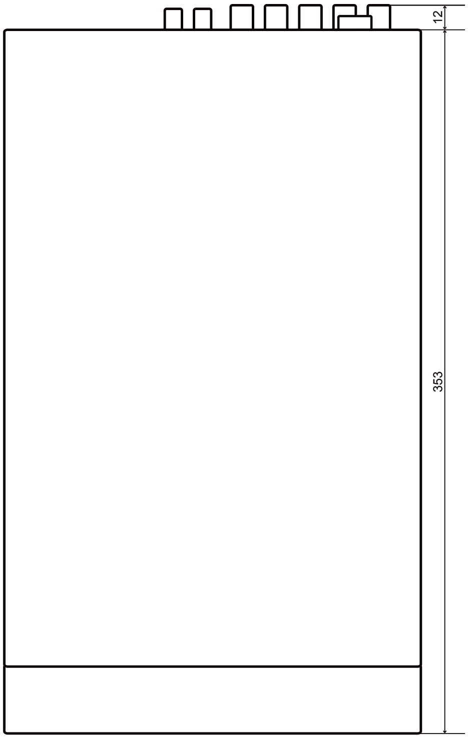
Item		Details	Note
Play	Display Mode	Single /4-splits	
	Play Mode	Play, Pause, Stop, 2xDigital Zoom Fast Forward/Fast Reverse - 2x, 4x, 8x,16x, 32x, 64x	
Backup		USB External HDD USB CD/DVD Writer, Internal DVD(SRD-470D only) USB Memory USB HDD-MAX 1(USB hub not supported)	
Network		Ethernet : 10/100/1000 BaseT, ADSL(PPPoE), DHCP	
Serial Communication		RS-485 → PTZ Device Control Remote Control Device RS-232C → POS	
Alarm		Input : 4 channels	
Remote Viewer	PC Requirements	CPU : Intel Core 2 Quad 2.5GHz or higher RAM : 2G VGA : 32M RAM(64M or more) DirectX 8.1	
	Operating Systems	Windows XP(Pro), Windows-2000(Pro) Windows Vista(Home Basic/Premium) Windows 7	
	Features	Live Image Monitoring Mode Local File Search & Play Back Mode Remote File Search & Play Back Mode	
Temperature (Operation)		0°C ~ 40°C (32°F ~ 104°F)	
Temperature (Storage)		-20°C ~ 60°C (-4°F ~ 140°F)	
Humidity (Operation)		20% to 85% RH	
Humidity (Storage)		20% to 85% RH	
Dimension (W x H x D)		215 x 353 x 88mm (8.46 x 13.88 x 3.64 inch)	H (leg not included)
Weight		SRD-470 : ~4Kg(8.82lb) SRD-470D : ~4.85Kg(10.69lb)	

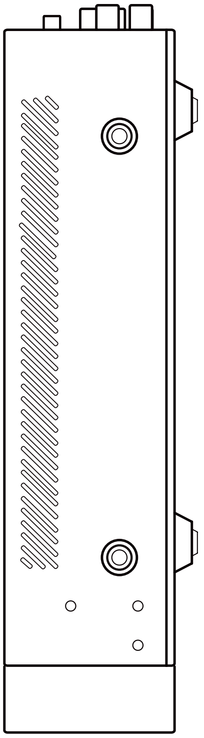
It needs extra H/W to support ATM/POS function. So please contact your vendor to obtain H/W.

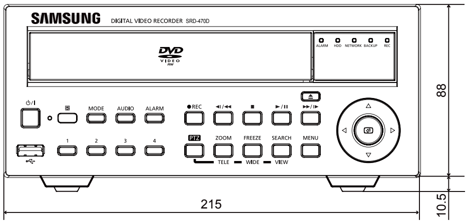
PRODUCT OVERVIEW

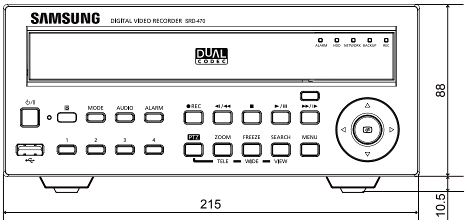
- SRD-470/470D


DC 12V
RS485
USB
NETWORK
ALARM IN
ALARM OUT
1 2 3 4 G 1 2 COM
IN 4
IN 3
IN 2
IN 1
OUT
AUDIO
SPOT
THROUGH
VIDEO OUT
VIDEO IN
4
3
2
1
RS-232C
CONSOLE
VGA






SAMSUNG
DIGITAL VIDEO RECORDER SRD-470D
DVD VIDEO
ALARM
HDD
NETWORK
BACKUP
REC
MODE
AUDIO
ALARM
● REC
■
1
2
3
4
PTZ
ZOOM
FREEZE
SEARCH
MENU
TELE
WIDE
VIEW
88
10.5
215


SAMSUNG
DIGITAL VIDEO RECORDER SRD-470
DUAL CODEC
ALARM
HDD
NETWORK
BACKUP
REC
MODE
AUDIO
ALARM
● REC
■
1
2
3
4
PTZ
ZOOM
FREEZE
SEARCH
MENU
TELE
WIDE
VIEW
88
10.5
215

DEFAULT SETTING

This returns the factory default settings.

The settings are made as follows;

- Use System/Load Factory Default in MENU

■ The default settings are based on SRD-470D.

Category	Details			Factory Default
System Settings	Date/Time/Language	Date/Time/Language	Date	YYYY-MM-DD
			Time Format	24 hours
			Time Zone	GMT
			Time Synchronize	OFF
			DST	OFF
			Language	English
	Permission Management	Admin	ID	admin
			New Password	4321
		Setting	Restricted Access	All
			Auto Logout	3 Min
	System Management	System Information	Broadcast Format	NTSC/PAL
Device	Camera	Camera	Video	ON
			Audio	OFF
			CH Name	CAM 01 ~ CAM 04
			SEQ-Dwell Time	5sec
			Progressive	OFF
		PTZ	ID	Camera No.
			Protocol	None
		Screen Setup	Brightness	50
			Contrast	50
			Color	50
	Storage Device	HDD Alarm	Check Alarm Output Port	OFF
			Duration	OFF
			Replace Alarm Output Port	OFF
			Duration	OFF
	Remote Device	Baudrate		9600
		Parity		None
		Data		8
		Stop bit		1
		Transfer Type		Half Duplex
		System Keyboard		OFF
		Remote Control		ON(00)

Category	Details			Factory Default
Device	POS Device			OFF
	Monitor	Monitor	Event Display	OFF
			Display	All
			VGA	800x600
			Sharpness	Level1 (Low)
			Display Position Setup	30
		Spot Out	Spot Out 1	CH1 ~ CH4
		Mode	Live Mode	ALL
			Play Mode	ALL
Recording	Recording Schedule	Channel 1		Event
	Event Record Duration	PRE Event		OFF
		POST Event		1 min
	REC Quality/ Resolution	Normal Recording	Resolution	CIF(S)
			Frame Rate	7.5 ips
			Record Quality	Level 4
		Event	Resolution	4CIF(L)
			Frame Rate	30 ips
			Record Quality	Level 4
	Record Option	Disk End Mode	Setup	Overwrite
			Disk End Beep	OFF
		Auto Delete		OFF
	Event	Sensor Detection	Sensor Operation	OFF
			Camera	Camera No.
			Alarm	None
			Duration	10 sec
		Motion Detection	Mode	OFF
			Sensitivity	Very High
			Alarm	None
			Duration	10 sec
		Motion Region		All Area
		Video Loss Detection	Video Loss State	OFF
			Alarm	None
			Duration	10 sec

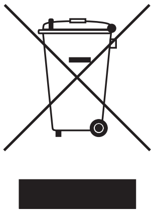
Category	Details			Factory Default
Network	Connection Mode	Connection	Connection Mode	Static IP
			Bandwidth	2Mbps
			IP	192.168.1.200
			Gateway	192.168.1.1
			Subnet Mask	255.255.255.0
			DNS	168.126.63.1
		Protocol	Protocol Type	TCP
			Port (TCP)	554~557
			Webviewer Port	80
	DDNS	DDNS Site		OFF
	Live Transfer	Resolution		CIF(S)
		Quality		Low
	Mailing Service	SMTP	Server	OFF
			Port	25
			Use Authentication	OFF
			Secure Transfer	Never
		Event	Event Interval	10 min
			Use Event Transfer	OFF
		Group	Group	OFF
			Recipient Permission	OFF

TROUBLESHOOTING

Symptom	Countermeasures
The system does not turn on and the indicator on the front panel does not work at all.	• Check if the power supply system is properly connected. • Check the system for the input voltage from the power source. • If the problem persists even after you have taken the above actions, check the power supplier and replace it with a new one if neccessary.
Some channels display just a black screen even if they receive video sources.	• Check if the camera connected to the system properly displays the image. Sometimes, this problem may occur on a camera that is not properly connected to the video source. • Check if the camera is properly supplied with power. • Sometimes, this problem may occur on a channel with weak video signal from a video distributor that is connected to multiple systems. In this case, input the video source of the camera directly into the DVR. This may find the cause and solve the problem.
If I press the [**REC**] button on the front panel, the REC indicator does not flash, nor the player start recording.	• Check if there is a free space on the HDD for the recording. • Check if the record mode is set to **ON** in the record mode setting.
The screen displays the logo image repeatedly.	• This may occur from a problem with the main board, or the related software is corrupt. Contact the nearest service center for more information.
The Channel button does not work on the Live screen.	• The Channel button does not work if the current screen is in the event monitoring mode. In the event monitoring screen, press the [**ALARM**] button to exit the screen and select a channel.
The cursor will not move to the Start button when I start the calendar search.	• Check if the channel and the date that you want to play are marked with the V symbol. Both channel and date should be checked before you can start playing with the Start button.
When the alarm sounds, I press the [**ALARM**] button on the front panel to release the alarm but it does not work. The alarm persists and I could not set it off in any way.	• Press the [**MENU**] button on the front panel to release the alarm in the following way: 1) To release the event monitoring mode : Monitoring Mode – set the duration of the event monitoring to Off. 2) To release the alarm sound : Event Record Mode - Alarm (Motion Detection/Video Loss) – deactivate the alarm sound. 3) To release the event : Event Record Mode - Alarm (Motion Detection/ Video Loss) – set the mode to Off.
No response is made even if I press the [**PTZ**] button on the Live screen.	• Menu → Camera → Check if the current protocols and other settings in the PTZ device are properly configured according to the PTZ camera.

Symptom	Countermeasures
I've found that the DVR does not recognize as many disks as installed when I have connected multiple external HDDs to the DVR.	• It takes time for the DVR to recognize multiple external HDDs. Try again in a moment and if the problem (of failure to recognize as many HDDs as connected) persists, it may occur due to a mechanical error of the HDD installed. Try again with a different HDD.
A message of “Need to reset date/time.” Is displayed on the screen.	• This message is displayed if there occurs a problem with the time setting of the internal clock or an error in the clock itself. Contact the retailer or the service center for more information.
The time bar is not displayed in Search mode.	• The timeline can switch between normal and extension mode. In extension mode, the time bar may not be displayed in the current timeline. Switch to normal mode or use the left or right button to navigate through the time bar.
The “NO HDD” icon and an error message are displayed.	• Check the HDD for connection. If the problem persists in a normal condition, contact the nearest service center to have the HDD checked by the service personnel.
I have installed an additional HDD on the DVR but it does not recognize the HDD.	• See the compatibilty list to check if the additional HDD is supported by the DVR. For the compatibility list, contact the retailer where you purchased the DVR.
I have connected an external storage device (external SATA HDD) to the DVR but the DVR seems not to recognize it.	• See the compatibility list of external storage devices to check if the connected device is supported by the DVR. For the compatibility list, contact the retailer where you purchased the DVR.
If I press the ESC key in full screen mode of the WebViewer, the system does not switch to a normal split mode.	• Press the ALT+TAB keys to select ‘ACTIVE MOVIE’ and press the ESC key again. The system will switch to a normal split mode.
I found it difficult to configure the network settings if using the default search, backup and router settings.	• For more information, refer to the user manual. • If you want to check the basics of the product for a quick start, refer to the quick start guide (backup, search).
I forgot the password.	• Contact the DVR administrator for help.
Backup data is just not played by the PC or DVR.	• When you are backing up data, you have choices about the player either: PC or DVR. Make your selection before proceeding. • If you are using the PC to play the data, the format of the backup file should be either AVI or SEC. • If you are using the DVR for this purpose, formatting backup files should be done by the DVR.
My player does not switch to Live mode while in playback.	• Press the Stop [■] button on the DVR or the remote control, or click the [■] icon on the launcher to switch to Live mode.

Symptom	Countermeasures
Recording does not work.	• If your player does not display a Live image at all, that indicates recording does not work so first check if you see an image on the screen. • Recording does not work if the recording settings are not properly configured. 1) Manual Record: Press the [**REC**] button on the front panel of the DVR or on the remote control to start recording. 2) Scheduled Record: Specify a desired time in Menu – Record - Recording Schedule. Recording will start at the specified time. - <**Continuous**> Record: Recording will proceed in any conditions at the specified time. - <**Event**> Record: When an event occurs, recording will perform only if the event is of alarm, motion detection and video loss. If there is no event found, recording will not perform. - <**Continuous / Event**> Record: If there is no event found, Continuous recording will perform. Whereas, if an event occurs, Event recording will perform.
The image quality of the recording data is not good.	• Increase the resolution and quality level in Menu – Record – Quality / Resolution. 1) Resolution: Select a bigger size when specifying the recording size. (4CIF> 2CIF>CIF) The recording image in the CIF format shows a deteriorated quality as it is enlarged from a small-sized image. 2) Record Quality: Specify a bigger level for the recording quality. • If you increase the resolution and the recording quality, the data size increases accordingly. So the HDD will be filled faster. Overwriting will overwrite the existing data so recording will proceed at a shorter interval.



Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

SALES NETWORK

SAMSUNG TECHWIN CO., LTD.
Samsungtechwin R&D Center, 701, Sampyeong-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea, 463-400
TEL : +82-70-7147-8740~60   FAX : +82-31-8018-3745

SAMSUNG TECHWIN AMERICA Inc.
1480 Charles Willard St, Carson, CA 90746, UNITED STATES
Tol Free : +1-877-213-1222   FAX : +1-310-632-2195
www.samsungcctvusa.com

SAMSUNG TECHWIN EUROPE LTD.
Samsung House, 1000 Hillswood Drive, Hillswood Business
Park Chertsey, Surrey, UNITED KINGDOM KT16 OPS
TEL : +44-1932-45-5300   FAX : +44-1932-45-5325

www.samsungtechwin.com
www.samsungsecurity.com
www.samsungipolis.com